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Searched: 2443163 segs, 439378781 residues
Total number of hits satisfying chosen parameters:
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Human polypeptide SEQ ID NO 3074.
WO200153312-A1.
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Human PRO polypeptide sequer
ABB95453 standard; protein; 234 AA.
Human angiogenesis related protein PRO1864 SEQ ID
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1. No. is the number of results predicted by chance to have a re greater than or equal to the score of the result being printed, is derived by analysis of the total score distribution.
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31-JAN-2002.
ABU89859 standard; protein; 234 AA. Novel human secreted and transmembru52003036147-A1.
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Human secreted polypeptide PRO1864,
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US2003036140-A1.
20-FEB-200
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Human secreted/transmembrane
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20-FER-2007
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Novel human secreted and transmembrane
US2003018173-A1.
23-JAN-2003.
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US2003036146-A1.
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US200304006-A1.
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US2003036138-A1.
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US2003049769-A1.
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                                                                       Human secreted/transmembrane
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US2003068755-A1.
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Human secreted/transmembrane
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Human secreted poly
US2003040071-A1.
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Human secreted/transmembrane protein
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US2003068704-A1.
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US2003064452-A1.
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide
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Human secreted polypeptide
US2003104549-A1.
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RESULT 178
ID ABM150
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Best Local Similarity
RESULT 174

ID ABR92807 standard; F
DE Human secreted polyF
PN US2003064462-A1.
PD 03-APR-2003.
PA (GETH) GENENTECH IN
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Best Local Similarity
RESULT 176
ID ABM11579 standard; p
DE Human secreted polyp
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Best Local Similarity
RESULT 180
                                                         ABM07004 standard; protein;
Human secreted polypeptide |
US2003068699-A1.
10-APR-2003.
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Human secreted/transmembrane
US2003064451-A1.
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Human secreted polypeptide
US2003064447-A1.
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Human secreted/transmembrane
US2003065159-A1.
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Human secreted polypeptide
US2003073175-A1.
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                                  ABO03331 standard; protein; 234 Human secreted/transmembrane pro
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05-JUN-2003.
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Human secreted polypeptide I
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Human secreted polypeptide F
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Human secreted/transmembrane
US2003054470-A1.
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US2003054468-A1.
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Human secreted polypeptide !
     ABR93417 standard;
Human secreted poly
US2003054478-A1.
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Human secreted polypeptide PRO1864,
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RESULT 204
ID AB029977 standard;
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Human secreted pol
US2003068718-A1.
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Human secreted/transmembrane protei
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Human PRO polypeptide #33.
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Human secreted/transmembrane
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           US2003068776-A1.
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                      Human secreted/transmembrane
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                           Human secreted polypeptide i US2003049778-A1.
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Human secreted/transmembrane
US2003032134-A1.
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US2003069407-A1.
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Human transmembrane PRO polypeptide
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Novel human secreted and transmembrane
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Human PRO polypeptide #33.
US2003049771-A1.
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide |
US2003068709-A1.
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                                   Human secreted/transmembrane US2003068684-A1.
                                                     ABO40704 standard;
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Human secreted polypeptide !
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10-APR-2003.
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Human secreted polypeptide
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Human secreted/transmembrane
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US2003100061-A1.
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US2003073182-A1.
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Human secreted polypeptide I
US2003068679-A1.
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                                                                                             ADA81337 standard; protein; i
Human secreted/transmembrane
US2003092121-A1.
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Human secreted polypeptide US2003104557-A1.
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Human secreted polypeptide I
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Human secreted polypeptide US2003064446-A1.
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide PRO1864,
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Human secreted/transmembrane
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US2003068734-A1.
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Human secreted/transmembrane protein
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide PRO1864,
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                                                   ABR96834 standard; protein;
Human secreted polypeptide E
US2003054462-A1.
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Human secreted polypeptide
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03-APR-2003.
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Human secreted poly
US2003073174-A1.
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Human secreted polypeptide
Human secreted p
US2003104541-A1.
05-JUN-2003.
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Human secreted/transmembrane
US2003068775-A1.
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                 ABM25368 standard; protein; 234 AA.
Human secreted polypeptide PRO1864,
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Query Match
Best Local Similarity
RESULT 325
ID AB046784 standard; pi
DE Human PRO polypeptide
PN US2003049762-A1.
PD 13-MAR-2003
PD 13-GENENTECH INC
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Best Local Similarity
RESULT 327
ID ADA83135 standard; p
DE Human secreted/trans
PN US2003049752-A1.
PD 13-MAR-2003.
PA (GETH) GENENTECH IN
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Best Local Similarity
RESULT 332
ID ABR84792 standard; p
DE Human secreted polyp
PN US2003040057-A1.
PD 27-FEB-2003.
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Best Local Similarity
RESULT 331

ID ABO06839 standard; p
DE Human secreted/trans
PN US2003040053-A1.
PD 27-FEB-2003.
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Best Local Similarity
RESULT 328

ID ABR71520 standard; p
DE Human secreted polyp
PN US2003032133-A1.
PD 13-FEB-2003.
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Best Local Similarity
RESULT 324

ID ABM19878 standard; p
DE Human secreted polyp
PN US2003104554-A1.
PD 05-JUN-2003.
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                                                                           ABR84792 standard; protein; 234 AA. Human secreted polypeptide PRO1864, US2003040057-A1.
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Human secreted/transmembrane protein (PRO)
US2003040053-A1.
27-FEB-2003.
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13-MAR-2003.
(GETH) GENENTECH INC.
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ABR73350 standard; protein; 234 AA. Human secreted polypeptide PRO1864, US2003054467-A1.
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INC. INC. 100.0%; Score y 100.0%; Pred.	y 100.0%; Pred.; protein; 234 AA.	100.0%; Score	d; protein; 234 AA. olypeptide PRO1864,	INC. 100.0%; Score y 100.0%; Pred.	d; protein; 234 AA. olypeptide PRO1864,	100.0%; Score y 100.0%; Pred.	d; protein; 234 AA. ptide #33.	100.0%; Score 100.0%; Pred.	INC.	d; protein; 234 AA. ptide #33.	100.0%; Score ty 100.0%; Pred.	ransmembrane protein	y 100.0%; Score	H INC.	d; protein; 234 AA. olypeptide PRO1864,	100.0%; Score ty 100.0%; Pred.	d; protein; 234 AA. olypeptide PRO1864,	100.0%; Score ty 100.0%; Pred.	d; protein; 234 AA. olypeptide PRO1864,	INC. 100.0%; Score y 100.0%; Pred.
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US2003064468-A1.
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Human secreted/transmembrane
US2003064466-A1.
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Human PRO polypeptide #33.
US2003064453-A1.
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US2003049754-A1.
13-MAR-2003.
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Human secreted/transmembrane
US2003049775-A1.
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Human secreted/transmembrane
US2003049774-A1.
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US2003104552-A1.
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ADA00345 standard; protein; 2
Human secreted/transmembrane
US2003027992-A1.
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Human secreted polypeptide
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Human secreted/transmembrane
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Human secreted polypeptide |
US2003068739-A1
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Human secreted polypeptide
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Human secreted polypeptide
US2003044924-A1.
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Human secreted/transmembrane
US2003036126-A1.
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Human secreted polypeptide US2003068763-A1.
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US2003040072-A1.
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                                      ABM17806 standard;
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US2003073170-A1.
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                      Human secreted pus2003036120-A1.
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Human secreted/transmembrane
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US2003073186-A1.
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US2003068687-A1.
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US2003059884-A1.
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                                                            ABM24453 standard;
Human secreted poly
US2003064444-A1.
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Human secreted polypeptide
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US2003104538-A1.
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ID ABR72740 standard;
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Human secreted polypeptide I
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US2003068754-A1.
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Human secreted polypeptide
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ID ABO15077 standard; p
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PN US2003044919-A1.
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Human secreted polypeptide PRO1864,
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Human secreted polypeptide
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US2003044928-A1.
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Human secreted polypeptide
ABM21403 standard; protein; 234 AA.
Human secreted polypeptide PRO1864,
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ID ABO46'
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RESULT 445
ID ADA82501 standard; F
DE Human secreted/trans
PN US2003049755-A1.
PD 13-MAR-2003
PA (GETH) GENENTECH IN
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RESULT 438
ID ABM14934 standard; p
DE Human secreted polyp
PN US2003068766-A1.
PD 10-APR-2003.
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RESULT 441
ID ABO37349
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Human PRO polypeptide #33.
US2003049760-A1.
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Human secreted polypeptide
US2003104544-A1.
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Human secreted/transmembrane
US2003068715-A1.
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Human secreted/transmembrane protein
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Human secreted polypeptide I
ADB85587 standard;
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                                                                       ABM31468 standard; protein;
Human secreted polypeptide F
US2003068761-A1.
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Human secreted polypeptide
US2003068713-A1.
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20-MAR-2003.
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ABM30858 standard;
Human secreted poly
US2003068771-A1.
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27-MAR-2003.
                                                                                                                                                       Human PRO1864 protein.
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US2003068762-A1.
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Human secreted/transmembrane
US2003105011-A1.
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                              ADH24046 standard; protein; 234 AA. Novel human secreted and transmembrane US2003180918-A1.
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Novel human secreted and transmembrane
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Human secreted and
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Human secreted and
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ADH53491 standard;
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US2003181673-A1.
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ADI01956 standard;
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US2003191290-A1.
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Human PRO polypeptide #7.
US2003181685-A1.
                                           ADH79620 standard; protein; 234 AA. Novel human secreted and transmembrane
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Best Local Similarity
RESULT 565
ID ADH06244 standard, p
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US2003180917-A1.
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Human PRO polypeptide #33.
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US2003068768-A1.
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                                    ADG69005 standard; protein; 234 Novel human secreted and transme US2003180849-Al.
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Novel human secreted and transmembrane protein PRO1864
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US2003180857-A1.
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Human PRO polypeptide #31.
US2003224984-A1.
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US2004023321-A1.
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09-OCT-2003.
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Human PRO polypeptide #7.
US2003181683-A1.
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Novel human secret
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ADJ99103 standard; protein;
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Novel human secreted and transmembrane protein
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Human PRO polypeptide #31.
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Human PRO1864 protein SEQ ID
WO2004024076-A2.
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Human PRO polypeptide #7.
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Novel human secreted and transmembrane protein
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Steriodogenic acute WO2005047536-A2.
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Neoplastic disease
US2005059102-A1.
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                    AEA08359 standard; protein;
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(NOVS ) NOVARTIS
(NOVS ) NOVARTIS
                                                                          Novel human secreted protein w02001794446 **
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Human NOV19a.
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WO2003029423-A2.
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Human polypeptide
WO200153312-A1.
 Human protein
EP1308459-A2.
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(HUMA-) HUMAN GENOME
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(HYSE-) HYSEQ INC.
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(CURA-) CURAGEN CORP.
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(HYSE-) HYSEQ INC.
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                   ADB64413 standard;
                                                      (HYSE-) HYSEQ INC.
                                                                        NO200179449-A2.
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(UYPA-) UNIV PASTEUR LOUIS.
(BRIM) BRISTOL-MYERS SQUIBB COUEY Match
95.6%; Seet Local Similarity 56.2%; P
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19 MAY-2005.

(DIAD-) DIADEXUS INC.
                                      ABG05498 standard; protein; Novel human diagnostic prot WO200175067-A2.
                                                                                                                                                                                                                                                                                                                                                        ABR47530 standard; protein; 445 Breast cancer associated proteir WO2003004989-A2
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                                                                                                                   Breast specific WO2005044075-A2.
                                                                                                                                                                                               Human polypeptide WO2005047534-A2.
                                                                                                                                                                                                                                                                             Human malignant EP1365034-A2.
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S5.6%;
Local Similarity 56.2%;
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                                                                                                                                      ADZ88812 standard;
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(INRM ) INST
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                    (HYSE-) HYSEQ INC
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27-OCT-2000.
(CNRS ) CNRS CENT NAT RECH SCI.
(IFRE-) IFREMER INST FR RECH EXPL MER.
(IFRE-) IFREMER TO T. 8%; Score 93.9
ery Match 21.9%; Pred. No.
                                                                                                                                                                                                    Streptococcus agalactiae pro FR2824074-A1.
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Human secretory polypeptide SPTM SEQ ID NO 1084
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ry Match 33.9%;
t Local Similarity 73.7%;
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ry Match 48.4%;
t Local Similarity 58.3%;
                                                                                                                    ADV80958 standard; protein; 605 AA. Streptococcus agalactiae protein, SEQ W0200292818-A2.
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WO200132882-A2.
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                                          ABP30317 standard; protein;
Streptococcus polypeptide SI
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Putative P. abyssi nucleoside-diphosphate-sugar
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(CNRS ) CNRS
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                                                                                                                                                                                                                                                             Arabidopsis thaliana protein; EP1033405-A2.
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                                                                                                                                                                                                                                                                                                                              AAG61678 standard; protein; Arabidopsis thaliana protein EP1033405-A2.
                                                                                                                                   ADQ39266 standard; protein; 421 AA. Human myocardial infarction-associated W0200405852-A2.
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(CNRS ) CNRS CENT NAT
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                                                                  Human myocardial WO2004058052-A2.
                                                                                                                                                                                       21-SEP-2000.
(HUMA-) HUMAN
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Human myocardial
WO2004058052-A2.
                                                                                   ADQ39263 standard;
                                                                                                                     (APPL-) APPLERA CORP.
                 ADQ39258 standard;
                                                  (APPL-) APPLERA CORP.
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Human myocardial ir
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26-JUN-2003.

(INCY-) INCYTE GENOMICS INC.

7.2%;

25.5%;

25.5%;
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                                                                                                                                                                                                                                                                                   Human myocardial
WO2004058052-A2.
                               ABU26680 standard;
Protein encoded by
                                                                                       WO2004058052-A2.
                                                                                                                                                                     ADQ39269 standard; protein;
                                                                                                                                                                                                                            Human NTRAN protein
                                                                                                                                                                                                                                                                                          ADQ39267 standard; protein; 339 AA. Human myocardial infarction-associated
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(APPL-) APPLERA CORP.
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Human myocardial infarction-associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human myocardial infarction-associated WO2004058052-A2.
                         WO200277183-A2
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                                                                                                                                                                                                                                    ADE28099 standard;
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Best Local Similarity
RESULT 668
ID AD096392 standard; p
DE T cell activation as
PN W02004058805-A2.
PD 15-JUL-2004.
PA (ASAH-) ASAHI KASEI
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Dest Local S
RESULT 670
RESULT 671
ID ADN63
DE Human
PN US200
PD 26-FE
PA (MILL)
PA (KEKU
PA (JUJJ
PA (LILL)
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Best Local Similarity
RESULT 665
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                           (SMIT/) SMITHSON G.
(MILL/) MILLET I.
(PEYM/) PEYMAN J A.
(KEKU/) KEKUDA R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Batten disease WO9708308-A1.
                                                                                                                                               ADA05822 standard; protein; Human NOV43a protein SEQ ID WO2003029424-A2.
                                                                                                                                                                                                                       ADQ39268 standard; protein; Human myocardial infarction-WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                           Ub-MAK-107.

(GEHO ) GEN HOSPITAL CORP

(UYLE-) RIJKSUNIV LEIDEN.

7.2
                                                                         Human NOV43a variant.
                                                                                                                                                                                                                                                         (ASAH-) ASAHI KASEI PHARMA CORP.
ry Match 7.2%; Score
t Local Similarity 25.5%; Pred.
                                                                                                                                                                                                                                                                                                                                                   (UYLE-) RIJKSUNIV LEI
                                                                                                                                                                                                                                                                                                                                                                              Batten disease
WO9708308-A1.
                                                                                                                                                                                                                                                                                                                                                                                                 AAW13577 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAW13582 standard; protein;
Batten disease CLN3 mutant
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9708308-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW13589 standard; protein;
Batten disease CLN3 mutant ;
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(UYLE-) RIJKSUNIV LEIDEN.
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                                                               26-FEB-2004
                                                                                                                                      10-APR-2003
                                                                        US2004038223-A1.
                                                                                                                               (CURA-)
                                                                                                                                                                                                      (APPL-) APPLERA CORP.
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                                                                                                            Local Similarity
                                                                                                                                                                                   ocal Similarity
KEKUDA
JU J.
LI L.
GUO X.
                                                                                                                              CURAGEN
                                                                                                                                                                                                                                                                                                                                                                                         CLN3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ard; protein;
polypeptide
                                                                                                                                                                                                                               infarction-associated
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associated
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25.5%;
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protein
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NO:182.
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| protein
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Query Match
Best Local Similarity
RESULT 673
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Best Local
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US2004038223-A1.
AAW13593 standard; protein; 467 AA.
Batten disease CLN3 mutant protein in family L61
                                                                                                                                                                           (PATT)
(SPYT)
(EDIN)
(ELLE)
                                                                                                                                                                                                                     (MILL/)
                                                                                                                                                                                                                                                               ADN62985 standard; protein; 440 AA
                                                                                                                                                                                                                                                                                                                                                     (SHEN)
                                                                                                  (PENA
                                                                                                                                                                                                                                       SMIT/)
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                                                                                                                                                                                                                                                                            ocal Similarity
                                                                                                                                                                                                                                                                                       ) EISEN A.
) GANGOLLI E !
) RIEGER D K.
) SPADERNA S !
                             ) EISEN A.
) GANGOLLI E A.
) RIEGER D K.
) SPADERNA S K.
                                                                                                                                                                                                                     MILLET I.
PEYMAN J A.
KEKUDA R.
                                                                       MILLER C E.
RASTELLI L.
STONE D J.
PENA C E A.
SHENOY S G.
SHIMKETS R A.
ROTHENBERG M I.
LEACH M D.
                                                                                                                                                                                                                                                                                                                                        PENA C E A.
SHENOY S G.
SHIMKETS R A.
ROTHENBERG M E.
                                                                                                                                      ZERHUSEN B D.
ANDERSON D W.
ZHONG M.
                                                                                                                                                                                                                                                                                                                                                           MILLER C E.
RASTELLI L.
STONE D J.
PENA C E A.
                                                      AGEE M L.
BERGHS C.
DIPIPPO V A.
                                                                                                                                                                                                                                                                                                                      AGEE M L.
BERGHS C.
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ANDERSON D
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MALYANKAR U M
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                                                                                                                                                                                                    GUO X
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Query Match
Best Local Similarity
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Best Local Similarity
RESULT 675
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Best Local Similarity
RESULT 679
                               Best Local Similarity RESULT 681
                                                                                                                 Query Match
Best Local Similarity
RESULT 680
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                                                                                                                                                 (ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABB89640 standard;
Human polypeptide (
WO200190304-A2.
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06-MAR-1997.
(GEHO ) GEN HOSPITAL CORP.
(UYLE-) RIJKSUNIV LEIDEN.
                                                                                                                                                                                                                                                                                                                                                                                                   ADY20253 standard;
PRO polypeptide SEQ
WO2005016962-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (PROT-) PROTEIN DESIGN LABS INC.
ary Match 7.2%; Score
t Local Similarity 25.2%; Pred.
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Human soft tissue a
WC2004048938-A2.
                                                                                                                                                                                                                                                                                                                          ABU40544 standard; protein; 500 AA.
Protein encoded by Prokaryotic essential
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (HUMA-) HUMAN GENOME SCI INC. 7.2%; ry Match 7.2%; Local Similarity 25.2%;
                                                                                                                                                                                                                                                                                                                                                                                         24-FEB-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HERM/) HERMANN K.
(CAST/) HEIDEN CASTANOS-VELEZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DE10316701-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-JUN-2004
AAW13588 standard;
Batten disease CLN3
WO9708308-A1.
                                                                                    WO200277183-A2.
                                                                                                                                                                                                                                      ADY09432 standard; protein; 527 AA. Plant full length insert polypeptide seqid
                                                                                                                                                                                                                                                                      (ELIT-) ELITRA PHARM INC.
ry Match 7.2%;
t Local Similarity 26.0%;
                                                                                                                                                                                                                                                                                                                WO200277183-A2.
                                                              (ELIT-) ELITRA PHARM
                                                                                             Protein encoded by
                                                                                                         ABU33210 standard;
                                                                                                                                                                                                     19-FEB-2004.
(LIUJ/) LIU J.
                                                                                                                                                                                                                             US2004034888-A1.
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                                                                                                                                                                                                                                                                                                                                                            ocal Similarity
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            CLN3
                                                                                                                                                                                                                                                                                                                                                                                                             rd; protein; 473 AA.
SEQ ID NO 6059.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             protein; 473 AA.
sarcoma-upregulated
          protein; 438
3 mutant prote
                                                                                              protein; 430 AA.
Prokaryotic essential
                                                                                                                                                                                                                                                                                                                                                                                                                                              7.2%;
25.2%;
                                        4 INC.
7.1%;
25.5%;
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25.2%;
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25.5%;
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17.6%;
         n; 438 AA.
protein
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No. 1.4;
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            family L10
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Protein encoded by
WO200277183-A2.
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(GEHO ) GEN HOSPITAL COR
(UYLE-) RIJKSUNIV LEIDEN
                                                                   AAW13586 standard; patten disease CLN3
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Plant full length i
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WO9708308-A1.
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1. NOV-2004.
(UYNC-) UNIV NORTH CAROLINA (6.9%;
ry Match 6.9%;
24.7%;
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(ELIT-) ELITRA PHARM INC.
                                                    409708308-A1.
                                                                                                                                                                                                                                                                                                                                                  (WARN ) WARNER LAMBERT CO. ry Match 6.9%; Local Similarity 19.5%;
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 GEN HOSPITAL CORP
RIJKSUNIV LEIDEN.
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05-JUN-2003.

(INCY-) INCYTE GENOMICS INC.

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US2003233675-Al.
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EP1033405-A2
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EP1033405-A2.
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Human MDDT protein
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Protein encoded by Prokaryotic essential
                                                                                                                          AAM39952 standard;
Human polypeptide
WO200153312-A1.
                                                                                                                                                                                                AAB54399 standard; protein; Human pancreatic cancer antwo200055320-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                      AEA19162 standard; protein; Chlamydia trachomatis protei
                                                    ADM04473 standard; protein; 238 AA. Human protein of the invention SEQ EP1347046-A1.
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                                                                                                                                                                                                                                                                       Herbicidally active WO200210210-A2
                                                                                                                                                                                                                                                                                        ABB92830 standard; protein;
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ry Match 6.7%;
t Local Similarity 23.3%;
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06-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                      ADC42920 standard; protein; 891 AA.
Vaccinia Virus Major Core protein P4a
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(ELT-) ELITRA PHARM INC.
(EV Match 6.7%;
C Local Similarity 19.0%;
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ry Match
Local Similarity 25.4%;
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(RATT/) RATTI G.
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                                   ASSOC BIOTECHNOLOGY.
                                                                                                                                   seq ID NO
protein; 249
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19.0%;
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immunogenic protein,
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WO200136440-A1.
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                                                                                                                                                                                                                                                                 ADL77826 standard; protein; 360 AA.
Albumin fusion protein related therapeutic
US2004010134-A1.
15-JAN-2004.
                                                                                                                                                                                                                                                                                                                                                    Human albumin fusion WO200177137-A1.
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(INSP ) INST PASTEUR.

(CNRS ) CNRS CENT NAT RECH SCI.

6.7%; Score
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(HYSE-) HYSEQ
                                                                                                                                                                                          ADX66260 standard; protein; 516 AA. Plant full length insert polypeptide US2004034888-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Photorhabdus luminescens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABM67388 standard; protein;
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AAR58703 standard; protein; HCMV IE-exon-4 subunit. WO9417810-A1.
                                                                       WO200277183-A2.
                                                                                                                                                                                                                                                                                                                                                                      ABG64559 standard;
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                                                    (ELIT-) ELITRA PHARM
                                                                                Protein encoded by
                                                                                          ABU25554 standard;
                                                                                                                                                                                                                                                 (ROSE/) ROSEN C A. (HASE/) HASELTINE W
                                                                                                                                                                                                                                                                                                                                  (HUMA-) HUMAN GENOME
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(LIUJ/) LIU J.
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SCREEN S E.
TABASKA J E.
CAO Y.
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                                                                                protein; 365 AA.
Prokaryotic essential
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21.2%;
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RESULT
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RESULT
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RESULT 716
ID AAW27275 standard;
DE Human cytomegalovir
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Human steroid-induced C3A liver cell protein
US6673549-B1.
06-JAN-2004.
(INCY-) INCYTE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human cytomegalovirus immediate-early W09740155-A1.
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(INCY-) INCYTE GENOMICS INC.

"LY Match 6.7%;

"Local Similarity 18.0%;
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30-OCT-1997.
(WIST-) WISTAR INST ANATOMY & BIOLOGY.
6.7%; Score 79.
2-JUN-ZUUS.
(INSP.) INST PASTEUR.
(INSP.) INST PASTEUR.
(INFM.) INSERM INST NAT SANTE & RECH!
(UYLY-) UNIV LYON 1 BERNARD CLAUDE.
(CNRS.) CNRS CENT NAT RECH SCI.
6.6%; Score 7
                                                                       AEB38189 standard; protein; 358 AA.
L. pneumophila protein SEQ ID NO 2521.
WO2005049642-A2.
                                                                                                                                                                                                                                                                               Drosophila melanogaster WO200171042-A2.
                                                                                                                                                                                                                                                                                                                                                                  H. pylori secreted WO9640893-A1.
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(WIST-) WISTAR INST
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L. pneumophila protein SEQ ID NO 5810
                                                                                                                                                                                                                                                           27-SEP-2001.
(PEKE ) PE CORP NY
                                                                                                                                                                                                                                                                                                     ABB60462 standard; protein;
                                                                                                                                  (INSP) INST PASTEUR.

(INRM) INST PASTEUR.

(INRM) INSERM INST NAT SANTE & RECH MEDICALE.

(UYLY-) UNIV LYON 1 BERNARD CLAUDE.

(CNRS) CRRS CENT NAT RECH SCI.
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(ASTR ) ASTRA AB.
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polypeptide
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RESULT 726
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                                                                                                                                  (INSP ) INST PASTEUR.

(INRM ) INSTRM INST NAT SANTE & RECH MEDICALE.

(UYLY-) UNIV LYON 1 BERNARD CLAUDE.

(CNRS ) CNRS CENT NAT RECH SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mouse heart alpha-kinase US2002177205-A1.
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Human 59590 protein
WO2003065984-A2.
ABU36298 standard;
Protein encoded by
                                                   (AMHP)
                                                                      WO2003048304-A2.
                                                                                           ADB10816 standard;
                                                                                                                                                                                     L. pneumophila p
WO2005049642-A2.
                                                                                                                                                                                                         AEB38367 standard;
                                                                                                                                                                                                                                                  04-NOV-2004
(FIVE-) FIV
                                                                                                                                                                                                                                                                   ADU02890 standard; protein; 165 AA. Novel human polypeptide seqid 1357. W02004093804-A2.
                                                                                                                                                                                                                                                                                                                                                                       ABO55689 standard; protein;
Human genome derived single
US2003194704-A1.
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                                                                                  Alloiococcus otitis
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(RANK/) RANK D
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h 6.6%;
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h 6.6%; Score 78.5;
Similarity 24.6%; Pred. No. 2
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Human TRICH-6, SEQ
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                                                      Homo sapiens ABC
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Human diagnostic and therapeutic pprotein
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25-MAR-2004.
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WO200140305-A1.
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Human ATP binding cassette,
WO200140305-A1.
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22-JUL-2004.
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WO2004060304-A2.
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(ACTI-) ACTIVE PASS PHARM INC.
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(ACTIVE PASS PHARM INC.
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Human ABC transporter ABCB9
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Amino acid sequence of a human
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Amino acid sequence
WO200164875-A2.
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ry Match 6.6%;
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        AAG20805 standard; protein;
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WO200277183-A2.
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Protein encoded by
WO200277183-A2.
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WO200170955-A2.
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                                                                                                                                                           Polypeptide encoded WO2003023013-A2.
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(INSP ) INS
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(ELIT-) 6.5%;
ry Match 6.5%;
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(HYSE-) HYSEQ INC.
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                         WO9708308-A1.
                                  Mouse Batten disease
                                         AAW13576 standard; protein; 438
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WO2004040000-A2.
13-MAY-2004.
                                 ADQ95948 standard;
T cell activation
WO2004058805-A2.
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(HINK/) HINKLE
(SLAT/) SLATER
                 (ASAH-)
                                                                                                                                                                     (PRIM-) PRIMAL INC
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WO9803549-A1.
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:ry Match 6.5%;
it Local Similarity 22.7%;
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                                                                           Arabidopsis thaliana protein;
EP1033405-A2.
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Protein encoded by
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EP1033405-A2.
06-SEP-2000.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAG42380 standard; protein; Arabidopsis thaliana protein EP1033405-A2.
                                                                                                                       .....ard; protein;
WO2003097686-Al.
27-NOV-2003
                                                                                                                                                                                                   ADT56855 standard;
Plant polypeptide,
US2004216190-A1.
                                                                                                                                                                                                                                                                 HCV polymerase protein #39. wo2005012502-A2.
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HCV antigen T7N1-30.
EP518313-A2.
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                                                                                                                                                                                                                                                                                                                                       HCV polymerase protein WO2005012502-A2.
                                                                                                                                                                                                                                                                                                                                                 ADX40818 standard; protein;
HCV polymerase protein #41.
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ABO65827 standard;
Klebsiella pneumon:
US6610836-B1.
                                                  (UYTS-) UNIV
                                                                 JP2002355074-A.
                                                                         Enterchaemorragic
                                                                                                                                                                                                                                                                                                                                                                                         (MITU ) MITSUBISHI
                                                                                 ADC01137 standard;
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Similarity 23.3%;
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        standard; protein;
la pneumoniae polype
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6.4%; S
22.5%; P
                                                                         protein; 278 AA.
E. coli 0157:H7-specific
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SEQ ID 6932.
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(VLAA-)
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PN US2'
PD 15
PA 1
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Query Match

Best Local Similarity

RESULT 788

ID ADP7467
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RESULT 794
ID ADQ07984
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RESULT 793
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RESULT 789
ID AAR90765
DE Human K+
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ULT 788

ADF74969 standard; prote...

Human 164-1b protein (SeqID 28).

4 W02003097686-A1.

D 27-NOV-2003.

C TAKE ) TAKEDA CHEM IND LTD.

Match 6.4%; S.

Match 13arity 23.3%; F
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(GENO-) GENOME THERAPEUTICS (GENO-) GENOME THERAPEUTICS (6.4%; ery Match 21.8%;
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(ADAM/) ADAMS M I
(WHIT/) WHITE O I
                                                                                                                                                                                                                                                                                                                                                                                                                             ABP58356 standard; protein; 494 AA.
Human potassium channel subunit Kv5.1.
W0200296944-A2.
05-DEC-2002.
(VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
EVLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
6.4%; Score 76.5; DB 6;
st Local Similarity 21.3%; Pred. No. 17;
                                                                            ADP25065 standard; protein; 526 PRO polypeptide SEQ ID NO:2243. W02004041170-A2.
                                                                                                                                                                       ADQ07984 standard;
Human hypothetical
WO2004061123-A2.
                                                                                                                                                                                                                                                                  Helicobacter pylori WO9640893-A1.
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Human K+ channel 2 mature protein.
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Human mature K+ channel 2 pi
US2003092895-A1.
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Putative mature potassium channel 2
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(HUMA-) HUMAN GENOME SCI INC.
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          ADU06638 standard; protein;
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(ASTR ) ASTRA AB.
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 cancer-associated
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protein F
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No. 18;
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No. 16;
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RESULT 801
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(HINK/) HINKLE G
(SLAT/) SLATER S
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                            Bacterial polypeptide #3779.
US2003233675-A1.
18-DEC-2007
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AAG09591 standard; protein; 287 Arabidopsis thaliana protein fra EP1033405-A2.
                                                                    AAG09592 standard; protein; Arabidopsis thaliana protein EP1033405-A2.
                                                                                                                               US6617156-B1.
09-SEP-2003.
(DOUC/) DOUCETTE-STAMM L A.
(BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                 ADN46225 standard; protein; Thermococcus kodakaraensis w02004022736-A1.
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W09640893-A1.
                                                            06-SEP-2000.
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ry Match 6.4%;
t Local Similarity 23.3%;
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(REAS-) RES ASSOC
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(CAST/) HEIDEN CASTANOS-VELEZ
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                                        Similarity
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faecalis polypeptide #2587.
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7 23.3%; Pred.
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15.7%;
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6.4%; Score 76.
22.6%; Pred. No.
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25.9%;
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22.1%;
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19.2%;
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             ADX40794 standard; I
HCV polymerase proto
WO2005012502-A2.
10-FEB-2005.
                                                                          (CAOY/) CAO Y.
(HINK/) HINKLE G ;
(SLAT/) SLATER S C
(CHEN/) CHEN X.
                                                                                                                                                                                                                                                                                                                                                                                                       ABB89424 standard;
Human polypeptide
WO200190304-A2.
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                                                                                                            Bacterial polypeptide #6036.
US2003233675-A1.
                                                                                                                                                                                                   US2003233675-A1.
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                                                                                                                                                              (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B S.
                                                                                                                                                                                                                                                                            Wheat sulphate permease-2. WO200004154-A2.
                                                                                                                                                                                                                                                                                                                                         Human colon cancer WO200055351-A1
                                                                                                                                                                                                                                                                                                                                                        AAB53400 standard;
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T cell activation a
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(ASAH-) ASAHI KASEI PHARMA CORP.
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                                                                   (GOLD/) GOLDMAN B S.
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                            ard; protein;
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HCV polymerase protein
WO2005012502-A2.
10-FEB-2005.
                                                                                                                                                                                                                                                                                                                                                                                                                  Streptococcus pneumoniae US6699703-B1.
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HCV polymerase protein #15.
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Novel S. pneumoniae protein
US6800744-B1.
05-OCT-2004.
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                          S. pneumoniae type WO200277021-A2.
                                                                                                             Streptococcus pn
US2005136404-A1.
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                                                                                                                                                                                                                                                                                                                                          S pneumoniae antigenic protein sequence SeqID403
WO2004020609-A2.
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                                              ABU02182 standard;
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ry Match 6.3%;
t Local Similarity 18.0%;
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Streptococcus pneumoniae type 4
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                                                                                  (BUSH/) BUSH D.
                                                                                                      23-JUN-2005
                                                                                                                                 AEA60112 standard;
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Best Local Similarity
RESULT 828
ID AAMOGE
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Best Local Similarity
RESULT 829
ID AEB38437 standard; p:
DE L. pneumophila prote:
PN W02005049642-A2.
PD 02-JUN-2005.
PD 02-JUN-2005.
PA (INSP) INST PASTEUR
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02-JUN-2005.
(INSP) INST PASTEUR.
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(INRM) INSERM INST NAT SANTE & RECH ME
(UYLY-) UNIV LYON 1 BERNARD CLAUDE.
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(CNRS) CNRS CENT NAT RECH SCI.
6.3%; Score 75.
Query Match
25.5%; Pred. No.
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                                                                                                                                                           AEB38437 standard; protein; L. pneumophila protein SEQ WO2005049642-A2.
                                                                                                                                                                                                                                                                                                                      AAU03852 standard;
G protein-coupled r
WO200138533-A2.
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L. pneumophila protein SEQ WO2005049642-A2.
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Escherichia coli TnaB protein.
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LS-AUG-2003.
(SERV-) LES LAB SERVIER SA.
(SERV-) LES LAB SERVIER SA.
6.3%;
FY Match 6.3%;
23.5%;
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(AJIN ) AJINOMOTO KK.
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ry Match 6.3%;
t Local Similarity 19.1%;
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(ELIT-) ELITRA PHARM INC.
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ry Match 6.3%;
t Local Similarity 19.1%;
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(UYLY-) UNIV LYON 1 BERNARD CLAUDE.
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ID NO 6030
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Pred. No. 17;
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Pred. No. 9
                  Score 75.5;
Pred. No. 18;
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(GPCR-like)
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(GPCR-like)
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18;
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14;
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Query Match
Best Local Similarity
RESULT 835
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU03820 standard;
G protein-coupled
WO200138533-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADO29507 standard;
Mouse GPCR HTR2A, WO2004040000-A2.
                                                                                                                                                            AEB35772 standard; protein; 437 AA.
L. pneumophila protein SEQ ID NO 104
WO2005049642-A2.
                                                                                                                                                                                                                                                                                                                                                                     Rice abiotic stress WO2003008540-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (PHAA ) PHARMACIA & UPJOHN.
PYY Match 6.3%;
It Local Similarity 19.1%;
                                                    Propionibacterium
                                                              AAU45917 standard;
                                                                                                       (CNRS )
                                                                                                                                                                                                                            (INRM ) INSERM INST NAT SANTE & RECH
(UYLY-) UNIV LYON 1 BERNARD CLAUDE.
(CNRS ) CNRS CENT NAT RECH SCI.
                                                                                                                                                                                                                                                                                  L. pneumophila I
WO2005049642-A2
                                                                                                                                                                                                                                                                                             AEB39222 standard; protein; 418 F
L. pneumophila protein SEQ ID NO
                                                                                                                                                                                                                                                                                                                           (SYGN ) SYNGENTA PARTICIPATIONS AG. ry Match 6.3%; Score t Local Similarity 15.6%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                            ABM90212 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2004022705-A2.
18-MAR-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADM72132 standard; protein; 392 AA
Human NTRAN polypeptide (clone ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAY-2001
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                                          WO200181581-A2.
                                                                                                        (INSP ) INST PASTEUR.
(INRM ) INSERM INST NAT SANTE & RECH
(IYLY-) UNIV LYON 1 BERNARD CLAUDE.
(CNRS ) CNRS CENT NAT RECH SCI.
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                                                                                                                                                                                                                                                              (INSP ) INST PASTEUR
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Similarity
                    CORIXA CORP.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; protein; 499
receptor-like
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SEQ ID NO:609.
                                                    ; protein; 445 acnes immunoge
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20.7%;
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21.4%;
6.3%;
24.8%;
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immunogenic
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RESULT 838

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RESULT 840
ID ADA341
DE Acinet
PN US6562
PD 13-MAY
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                                                                                  RESULT 84
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Propionibacterium WO2003033515-A1.
                                                                                                                                                                                                                                                                                                                                                                                                          ADR14597 standard; protein; 473 AA. Human NF-kappaB pathway-associated W02004065577-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABM87563 standard; protein; Rice abiotic stress responsi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABM42436 standard;
                                                                                                                                                                            US2004034888-A1.
                                                                                                                                                                                   ADX80121 standard; protein; 635 AA.
Plant full length insert polypeptic
                                                                                                                                                                                                                                                            US6617156-B1.
                                                                                                                                                                                                                                                                      Enterococcus faecalis
                                                                                                                                                                                                                                                                               ADH86490 standard;
                                                                                                                                                                                                                                                                                                                                   Human transporter WO2004048599-A2.
                                                                                                                                                                                                                                                                                                                                                       ADP99138 standard;
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                                                      JP06141870-A.
                                                                                                                                                                                                                                                                                                                                                                       (BRIM ) BRISTOL-MYERS SQUIBB CO.
ry Match 6.3%; Sco
Local Similarity 21.0%; Pre
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(GENO-) GENOME THERAPEUTICS CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0-JAN-2003
                                                                                                                                                                                                                                (DOUC/) DOUCETTE-STAMM L A. (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SYGN ) SYNGENTA PARTICIPATIONS AG
                                                                         AR54066 standard;
                                                                                                                                                                  9-FEB-2004
                                                                                                                    TABA/) TABASKA J
                                                                                                                                                                                                                                                                                                                   INCY-) INCYTE CORP.
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                                                                                         ocal Similarity
                                                              66 standard; protein; 1 non-B hepatitis virus
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                                                                                                                     SCREEN S E.
TABASKA J E.
Similarity
                                                                                                                                       KOVALIC D K.
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                                                                                                                                                         LIU J.
                            ZH TOKYOTO RINSHO IGAKU SOGO SANWA KAGAKU KENKYUSHO CO.
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us gene #4
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Best
RESULT
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RESULT 851
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RESULT 847
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABB64494 standard; protein; Drosophila melanogaster poly WO200171042-A2.
27-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP07133291-
                                                                                                                             ADF74954 standard;
Rat 164-1h protein
WO2003097686-A1.
                                                                                                                                                                     (MOLE-) INST MOLECULAR AGROBIOLOGY.
(MATE-) INST MATERIALS RES & ENG.
FIY MATCH
15 Local Similarity 23.8%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                       ADQ89656 standard;
Antagonist of cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Drosophila melanogaster rutabaga
WO2003103704-A2.
                                             Seven transmembrane WO9412635-A2.
                                                                                                                                                                                                                                   AAB66797 standard; protein; 200 AA.
Porcine reproductive and respiratory
                                                                                                                                                                                                                                                                                                                       ADX40796 standard; protein; HCV polymerase protein #19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADG20763 standard; protein;
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                                                                   AAR53748 standard; protein;
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ry Match 6.3%; Score 75; DB
t Local Similarity 22.9%; Pred. No. 2e+
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                                   09-JUN-1994.
                                                                                                            (TAKE )
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                         (ICOS-) ICOS CORP.
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h 6.2%;
Similarity 23.3%;
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25.4%;
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25.8%;
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polypeptide
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3.1e+02;
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2e+02;
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79;
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2e+02;
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2e+02;
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71;
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(ICOS-).
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PN W'
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RESULT 862
ID AAU91235 standard; p
DE Human 7 transmembran
PN US6348574-B1.
PD 19-FEB-2002.
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ID AAY90642
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US5759804-A.
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Human 7 transmembrane
US6348574-B1.
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Human CX3CR1 protein.
WO200172830-A2.
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Human 7TM receptor
US6107475-A.
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(ICOS-) ICOS
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Human CX3C chemokine receptor 1.
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(ICOS-) ICOS CORP.
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(AREN-) ARENA PHARM
                                          AAU91234 standard;
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(ICOS-) ICOS
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22-AUG-2000.
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transmembrane domain
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Best Local Similarity
RESULT 864
ID AAU84327 standard; p
DE Protein CX3CR1 diffe
PN W0200210436-A2.
PD 07-FEB-2002.
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Best Local Similarity
RESULT 870
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                                                                                            Mutated human serotonin V28.
US2003105292-A1.
05-UUN-2003.
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Human fractalkine:
WO2003039475-A2.
                                                                                                                                                                            ADC22649 standard; protein; 355 A Human G protein-coupled receptor US6555339-B1. 29-APR-2003.
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08-AUG-2002.
(LIFE-) LIFESPAN BIOSCIENCES
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Human serotonin V28.
US2003105292-A1.
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ery Match 6.2%;
st Local Similarity 25.8%;
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Human CX3C chemokine fractalkine
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                                                                   (CHAL/) CHALMERS
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(BEHA/) BEHAN D P
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or (GPCR)
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Human CX3CR1 polypeptide.
WO2003104484-A1.
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Human GPCR CX3CR1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-2003.
(META-) METABOLEX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D
                                                                                 ADY15644 standard; FPRO polypeptide SEQ WO2005016962-A2.
                                                                                                                                                                   ADQ39421 standard; protein; 355 AA. Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                    ADP23931 standard; protein; 355 PRO polypeptide SEQ ID NO:1109. WO2004041170-A2.
                                                                                                                                                                                                                                                                                                                                  ADP54585 standard; protein; 355 AA.
Human PRO protein sequence SEQ ID NO:561.
WO2004039956-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADQ18141 standard; protein; 355 AA.
Human soft tissue sarcoma-upregulated protein
איניטייי standard; protein; 362 AA.
Human myocardial infarction-associated gene
WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                    Human PRO protein WO2004039956-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                             ADP56020 standard; protein;
Human PRO protein sequence s
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10-JUN-2004.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PROT-) PROTEIN DESIGN LABS
ry Match 6.2%;
Local Similarity 25.8%;
                                                                           24-FEB-2005
                                                                                                                                                                                                                                                                                                                                                                                                (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                           L3-MAY-2004
                                                                (GETH ) GENENTECH
                                                                                                                                                (APPL-) APPLERA CORP.
                                                                                                                                                                                                                               GETH ) GENENTECH INC.
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Local Similarity 25.8%;
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                                                                INC.
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SEQ ID NO:370.
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                                                                                             protein; 355 AA
Q ID NO 1450.
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25.8%;
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RESULT 888
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RESULT 886
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RESULT 885
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RESULT 882
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RESULT 887
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RESULT 883
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Rat 5-HT2 receptor :
US6383762-B1.
07-MAY-2002.
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(TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
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03-SEP-1998.
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Rat 5-HT2A serotonin recept
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                                                                                               AAM93692 standard;
Human polypeptide,
EP1130094-A2.
                                                                                                                                                                                   ADF74971 standard;
Rat 164-1b protein
WO2003097686-A1.
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Rat 5-HT2A serotonin recepto
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rat 5-HT2A serotonin
WO9838217-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW77111 standard; protein;
Rat 5-HT2A serotonin recept
                                                                        05-SEP-2001.
(HELI-) HELIX RES INST.
                                                                                                                                                                                                                               (SYNA-) SYNAPTIC PHARM CORP.

ry Match 6.2%;
t Local Similarity 21.0%;
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ADL31569 standard; protein; 562 AA. Human protein encoded by a full length cDNA EP1396543-A2.
10-MAR-2004.
                                                                                                                                        (TAKE ) TAKEDA CHEM IND LTD.
ry Match 6.2%;
t Local Similarity 23.3%;
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(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAW77110 standard;
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(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
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(SeqID 30)
                                                                                                         protein; 562 AA.
SEQ ID NO: 3602.
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25.8%;
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21.0%;
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receptor C322K mutant.
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Pred. No. 27;
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No. 27;
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No. 19;
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No. 34;
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                      clone SeqID 3602
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RESULT 893
ID ADX66/
DE Plan'
PN US2'
PD 19
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Best Loca
RESULT 897
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Best Local Similarity
RESULT 890
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Best Local Similarity
RESULT 896
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Best Local Similarity
RESULT 895
ID ABB92731 standard;
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(ZHOU/) ZHOU Y.
(KOVAL/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB62948 standard; protein; 597 AA. Drosophila melanogaster polypeptide WO200171042-A2.
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T cell activation
WO2004058805-A2.
                                                                                                                                                                                                                                                                                                  ADA36878 standard; protein; Acinetobacter baumannii prot
                                                                                                                                                                                                                                                                                                                                                                                                                                           ADX66440 standard; protein; Plant full length insert pol US2004034888-A1.
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(ASAH-) ASAHI KASEI PHARMA CORP.
6.2%; Score
ry Match 23.1%; Pred.
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                                                                                                                            AAE20477 standard;
HCV-S1 full-length
WO200208447-A2.
                                                                                                                                                                                           07-FEB-2002.
(FARB ) BAYER AG.
                                                                                                                                                                                                                           ABB92731 standard; protein; 1808 AA.
Herbicidally active polypeptide SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADR86160 standard;
                                                                                                                                                                                                                 WO200210210-A2.
                                                    ADF07294 standard;
                                                                                          31-JAN-2002.
(MOLE-) INST MOLECULAR & CELL BIOLOGY
(BHRL/) EHRLICH G.
                                                                                                                                                                                                                                                                              (GENO-) GENOME THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ELIT-) ELITRA PHARM INC.
(ELIT-) ELITRA CANADA LTD.
(EY Match 6.2%;
: Local Similarity 18.2%;
                                JS6605709-B1.
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                                                                       Local Similarity
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           GENOME
                                        standard; protein;
polypeptide #3407.
THERAPEUTICS CORP. 6.2%; Score 74;
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                                                                                                                                       protein; 301 polyprotein.
                                                                       6.2%;
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17.3%;
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21.1%;
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27.2%;
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protein
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; Score 74.5; I
; Pred. No. 70;
                                                  154 AA.
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1 protein #158
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                                                                        Score 74.5;
Pred. No. 3
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#4039.
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No. 43
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No. 34;
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No
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No
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36;
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.5e+02;
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.7e+02;
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Length 154;
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                                                                                                                                                                                                                                                                      940;
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Best Local Similarity
RESULT 898
ID ABU70365 standard; p
DE Human adipocyte bait
PN W0200286122-A2.
PD 31-OCT-2002.
        Query Match
Best Local S
RESULT 906
                                                                                      Best Local Similarity RESULT 905
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                                                                                                                                    Streptococcus pneumoniae ORF US2005136404-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABU70366 standard; protein; 2
Human adipocyte bait protein,
WO200286122-A2.
                                                                                                                                                                                                                                                                                                                                                                                                         (CAOY/) CAO Y.
(HINK/) HINKLE G (SLAT/) SLATER S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABU70365 standard; protein; Human adipocyte bait protein WO200286122-A2.
                                                        ABO00448 standard; protein; Novel human polypeptide #35 WC2003023013-A2.
                                                                                                                                                                                                                        ADR94027 standard; protein;
Novel S. pneumoniae protein
US6800744-B1.
05-OCT-2004.
                                                                                                                                                                                                                                                                                                                 S. pneumoniae type WO200277021-A2. 03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                   US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (INRG ) INRA INST NAT RECH AGRONOMIQUE.
ry Match 6.2%; Score 74;
it Local Similarity 24.3%; Pred. No.
AAR88412 standard; protein;
                                      20-MAR-2003.
(HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                              (CHIR-) CHIRON SPA. (GENO-) INST GENOMIC RES.
                                                                                                                                                                                                                                                                                                                                               ABU02869 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FR2807446-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABB54180 standard;
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                                                                                                                     (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                     (GOLD/) GOLDMAN B
                                                                                                                                                                                                                                                                                                                                                                                                 (CHEN/) CHEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          actococcus lactis
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                   Local Similarity
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                                                                                                                                 DOUCETTE-STAMM L A.
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                                                                                                                                                                                                                                                                                                                                    protein;
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18.5%;
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sequence,
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protein
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n, melatonin
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                                                                                                                                                                                             Staphylococcus aureus WO200294868-A2.
                                                                                                                                                                                                                                                              Rat growth hormone WO9721730-A1.
                                                                                                                                                                                                                                                                                                                                  ADO29552 standard;
Human GPCR MTNR1A,
WO2004040000-A2.
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ry Match 6.2%;
t Local Similarity 18.5%;
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                                             US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW94761 standard; protein; 350 AA
                                                                                                                          Lactococcus lactis FR2807446-A1.
                                                                                                                                            ABB55224 standard;
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(JCRP-) JCR PHARM CO LTD.
                                                                                                   (INRG ) INRA INST
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                                                                                                                                                                                                                                               MERI ) MERCK & CO INC.
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                                                                                          NAT RECH AGRONOMIQUE.
6.2%; Score 74;
y 20.4%; Pred. No.
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SEQ ID NO:654.
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6.2%;
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in #2419.
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Pred. No.
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Best Local Similarity
RESULT 915
ID AAY80509 standard; p
DE F. lutescens L-lysin
PN W0200008170-A1.
PD 17-FEB-2000.
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Best Local S
RESULT 920
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RESULT 919
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RESULT 918
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RESULT 923
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RESULT 922
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                              AAG32488 standard; p:
Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                                                                                                                                                                    AAU25578 standard; protein; 192 AA.
Human G Protein-Coupled Receptor (GPCR)
W0220162797-A2.
                                                                                                                                                                                                                                                                                                                                                      06-SEP-2000.
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Arabidopsis thaliana protein
EP1033405-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (TOKR-) ZH TOKYOTO RINSHO IGAKU SOGO (SANW ) SANWA KAGAKU KENKYUSHO CO. (TOPU ) TONEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR54067 standard; protein; 1031 AA. Non-A, non-B hepatitis virus gene #6 JP06141870-A.
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(SAOC ) MERCIAN CORP.
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                                                                                                               ABU44044 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                   Coronavirus membrane WO2004096842-A2.
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                     06-SEP-2000.
                                                                                                                                                                           11-NOV-2004.
(BCCA-) BC CANCER AGENCY.
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                                                                                             (ELIT-) ELITRA PHARM INC.
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Prokaryotic essential
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26.3%;
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n seqid 38.
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n fragment
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RESULT 929
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RESULT 928
ID ADQ757
DE Codon
PN WO2004
PD 15-JUL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADF05982 standard; protein;
Bacterial polypeptide #2095
US6605709-B1.
                 ADP12517 standard;
Protein encoded by
WO2004042346-A2.
                                                                                                                                         AAG51384 standard; pi
Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                                                                            06-SEP-2000.
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Codon optimised hCN
WO2004058166-A2.
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                                                                                  Human cytomegalovirus
WO200163286-A2.
                                                                                                                                                                                                                   AAG32486 standard;
                                                                                                                                                                                                                                                             Arabidopsis thaliana EP1033405-A2.
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(MONS ) MONSANTO TECHNOLOGY
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                                                                                                    AAB86544 standard;
                                                                                                                                                                                                                                                                              AAG51385 standard;
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                                                                   30-AUG-2001.
(KERN/) KERN F.
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n AD169
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EXPRESSION

DIAGNOSTICS INC

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RESULT 934
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Candida albicans essential pr
W0220253728-A2.
11-JUL-2002.
(BLIT-) ELITRA PHARM INC.
(ELIT-) ELITRA PHARM INC.
(BLOTA) MACTO
LOCAL Similarity 20.8%;
                                                    ABB61737 standard; protein;
Drosophila melanogaster pol;
WO200171042-A2.
27-SEP-2001.
                                                                                                                                                                                              (HINK/) HINKLE (SLAT/) SLATER (CHEN/) CHEN X.
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US2003233675-A1.
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Protein encoded by
WO2004042346-A2.
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Protein encoded by
WO2004042346-A2.
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Protein encoded by
WO2004042346-A2.
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          ADS96670
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ry Match 6.2%; Score
t Local Similarity 19.3%; Pred.
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protein #29119.
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polypeptide
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NANBH virus strain
EP532167-A2.
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Streptococcus polypeptide SEQ ID NO 7910.
WO200234771-A2.
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Murine hepatitis vi
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T. aureum 7091 elongase TELO1 from
WO200208401-A2.
31-JAN-2002.
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E. faecium protein
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                                                                   Fungal 7091 elongase proteir
US2003163845 **
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ry Match 6.1%; Score
t Local Similarity 20.3%; Pred.
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                             MUKE/) MUKERJI P.
(LEON/) EUN-YEONG LEONARD
(HUAN/) HUANG Y.
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sequence SEQ ID
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HC-J8 protein.
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US2005009140-A1.
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(LEON/) LEONARD A E.
(HUAN/) HUANG Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADW12982 standard;
                           AAW19613 standard;
Rat growth hormone
WO9722004-A1.
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(GUOX/
(TCHE/
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                                                                                                                                                                                                                                                                                                                                ADN61865 standard; protein;
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                     19-JUN-1997
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                                                                                                                                                                              GORMAN L.
MILLER C. E.
KEKUDA R.
PATTURAJAN M.
GANGOLLI E A.
VERNET C. A.
GUO X. S.
TCHERNEY V. T.
                                                                      CATTERTON E.
LEITE M W.
ZHONG H.
ALSOBROOK J I
LEPLEY D M.
RIEGER D K.
BURGESS C E.
                                                                                                                                                FERNANDES E R.
CASMAN S J.
MALYANKAR U M.
GERLACH V.
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SPYTEK K A.
SHENOY S G.
TAUPIER R J.
              MERCK & CO
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SPADERNA S
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19.4%;
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secretagogue
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in #2394.
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RESULT S
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DE MS
PN WS
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RESULT 963
ID ABU31419 standard; p:
DE Protein encoded by P:
PN W0200277183-A2.
PD 03-OCT-2002.
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RESULT
ID AA
DE Ar
PN EP
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RESULT 959
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RESULT 957
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RESULT 960
ID AAG50065 standard;
                                                          AEA16981 standard; p:
Arabidopsis thaliana
US2005125159-A1.
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Arabidopsis thaliana
EP1033405-A2.
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Arabidopsis thaliana
EP1033405-A2.
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Arabidopsis thaliana
EP1033405-A2.
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10-MAY-2001
(TAKE) TAKEDA CHEM
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EP841394-A2.
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AAG50064 standard;
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(SMIK ) SMITHKLINE
(SMIK ) SMITHKLINE
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                                 (STEI/) STEIN J
(CAOY/) CAO Y.
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ina protein ;
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na protein fragme
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protein;
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BEECHAM PLC.
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Prokaryotic essential
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Best Local Similarity RESULT 969
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RESULT 967
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EP1033405-A2.
06-SEP-2000.
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ADQ96000 standard;
T cell activation a
WO2004058805-A2.
                                                                                                                             ABU31136 standard;
Protein encoded by
WO200277183-A2.
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WO200294867-A2.
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                                                  06-SEP-2000.
                                                                   AAG24011 standard; protein; !
Arabidopsis thaliana protein
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(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                      WO200262999-A2.
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Human NOV13b prote
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(INSP ) INST PASTEUR.
(CNRS ) CNRS CENT NAT RECH (CNRS ) CNRS CENT NAT RECH (6.1%;
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                                                           EP1033405-A2.
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Prokaryotic (
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RESULT 983
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ID AAU36:
DE Staph)
PN WO2001
PD 27-SE1
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Best Local Similarity
RESULT 975
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                                                                                                                                                                                                                                  Staphylococcus aureus spoIIIE protein. W09726338-A1.
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(FARB ) BAYER PHARM
                                                                                                                                                                                                                                                                                                                Human adult neural WO9857976-A1.
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                 ABJ19057 standard;
Pathogen specific a
WO200259148-A2.
                                                                                                                                                                WO200277183-A2.
                                                                                                                                                                       ABU42392 standard; protein; 788 AA. Protein encoded by Prokaryotic esse
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24-JUL-1997.
(SMIK ) SMITHKLINE BEECHAM PLC.
6.1%; Score
23.3%; Pred.
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Human adult neural tissue secreted
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                                                                       (ELIT-) ELITRA PHARM INC.
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                          l; protein;
antigen re
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CISTEM BIOTECHNOLOGIES

GMBH

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Query Match
Best Local S
RESULT 984
ID ABM73117
DE Staphyloc
PN W02002948
PD 28-NOV-20
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                                                                                                                                                                                                                                                                                                                                       AAM51861 standard;
Murine polycystic l
WO200177331-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 T cell activation
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Protein encoded by
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                                                                              Polycystic kidney disease protein US2004248160-A1.
                                                                                                                                                            Marker gene related EP1394274-A2.
                                                                                                                                                                                                                                                                                                (MILL-) MILLENIUM PHARM INC

ry Match 6.1%;

t Local Similarity 21.3%;
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                                                                                                                                                                                 ADJ76159 standard;
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US2002035056-A1.
                                                                                                                                                                                                                                                                  ABB07819 standard; protein; 966
Mouse polycystic kidney disease
                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human diagnostic protein #24237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ASAH-) ASAHI KASEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (CHIR-) CHIRON SPA
Human hypoxia-responsive WO2005033293-A2.
                   ADZ26335 standard;
                                                                      09-DEC-2004.
                                                                                                   ADV66235 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                    (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                             ABG24246 standard; protein; 913 AA.
                                                           (MILL-) MILLENNIUM PHARM INC
                                                                                                                                           (GENO-)
                                                                                                                                                                                                                        (CURT/) CURTIS R A J.
(SILO/) SILOS-SANTIAGO I.
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kidney dis
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fragment
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d amino ac
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        in; 966 AA.
protein CNGH0002.1.
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acid sequence
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Gease protein 7
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le+02;
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(ELIT-,
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RESULT 1001
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DE Plant
PN US2'
PD 19
PA '
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Best Loca.
Best Loca.
BESULT 1000
ID ABUL5'
DE Pro'
PN PD
PD
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(UYOR-)
Query Match
Best Local &
RESULT 996
ID ADZ11/
DE MARC/
PN US
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ID ABGARA
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RESULT 994
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RESULT 999
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Best Local S
     19-FEB-2004.
(LIUJ/) LIU J.
(ZHOU/) ZHOU Y.
                                                                                                                   ABU15302 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                   ABU05456 standard; protein; 209 AA. M. tuberculosis and M. leprae marker W0200274903-A2.
                                                                                                                                                                                                                                                                                   ADX40795 standard; protein; HCV polymerase protein #18. W02005012502-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADZ11490 standard; protein; MARCH VI protein, SEQ ID 59. US2005079613-A1.
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(UYOR-) UNIV OREGON HEALTH SCI.
(LYOR-) UNIV OREGON HEALTH SCI.
6.1%; Score
7-7-1 Similarity 19.5%; Pred.
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MARCH VI protein, S
US2005079613-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human protein similar to yeast SSM4, TEB4, SEQ ID W02004078035-A2.
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                                                                                                                                                                                                                                                                                                                                                                  ABG07373 standard; protein; 976 AA. Novel human diagnostic protein #7364.
                                              Plant full length
                                                                                                                                                                               26-SEP-2002.
(INSP) INST PASTEUR.
                                                       ADY24595 standard; protein;
                                                                                                                                                                                                                                                                                                                                              (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                            (UYOR-) UNIV OREGON HEALTH (6.1%; ry Match 6.1%; t Local Similarity 19.5%;
                                    JS2004034888-A1.
                                                                                                (ELIT-) ELITRA PHARM
                                                                                                          03-OCT-2002
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                                                                           Local Similarity
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SEQ ID 49.
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stic protein
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Prokaryotic e
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19.5%;
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22.1%;
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No.
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No
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15;
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5.3e+02;
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1.1e+02;
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1.1e+02;
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1.1e+02;
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1.1e+02;
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Query Match
Best Local Similarity
RESULT 1002
ID ADX95386 standard; p
DE Plant full length in
PN US200403488-A1.
PD 19-FEB-2004.
PA (LIUJ/) LIU J.
PA (ZHOU/) ZHOU Y.
PA (KOVA/) KOVALIC D K.
PA (SCRE/) SCREEN S E.
PA (TABA/) TABASKA J E.
PA (CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
RESULT 1005
                                                                    Best Local Similarity RESULT 1007
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RESULT 1003
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Best Local Similarity
RESULT 1006
                                                                                                              19-FEB-2004.

(LIUJ/) LIU J.
(ZHOU/) ZHOU Y.
(ZHOU/) SCREEN S E.
(SCRE/) SCREEN S E.
                                                                                                                                                                                                                                                                                                                                                                                                      ADY10668 standard; protein; 307 AA.
Plant full length insert polypeptide
US2004034888-A1.

19-FEB-2004.
(LIUJ) LIU J.
(ZHOU) ZHOU Y.
(KOVA) KOVALIC D K.
(SCRE) SCREEN S E.
(TABA) TABASKA J E.
(CAOY) CAO Y.
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(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                      (ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
19-FEB-2004.
(LIUJ/) LIU J.
(ZHOU/) ZHOU Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SCRE/) SCREEN S E. (TABA/) TABASKA J E. (CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                             ADY11265 standard; protein; 307 AA. Plant full length insert polypeptide US2004034888-A1.
19-FBB-2004.
(LIUJ/) LIU J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABB53879 standard;
Lactococcus lactis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADX95386 standard; protein; plant full length insert pol US200403488-A1.
19-FEB-2004.
(LIUJ/) LIU J.
                                             ADY11014 standard; protein; 308 AA. Plant full length insert polypeptide
                                                                                                                                                                                  ADY10993 standard;
Plant full length:
US2004034888-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FR2807446-A1.
                                  US2004034888-A1
                                                                                                    (TABA/) TABASKA J
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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h 6.1%;
Similarity 22.9%;
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protein yfgG.
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25.3%;
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polypeptide
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%; Score 72.5
%; Pred. No.
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No. 25;
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                                                                                72.5;
No. 25;
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No. 22;
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Ouery Match
Best Local Similarity
RESULT 1008
ID ADY10930 standard; p
DE Plant full length in
PN US2004034888-A1.
PD 19-FEB-2004.
PA (LIUJ/) LIU J.
PA (ZHOU/) ZHOU Y.
PA (SCRE/) SCREEN S E.
PA (SCRE/) SCREEN S E.
PA (TABA/) TABASKA J E.
                                                                                                                                                                 ID
PN
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Best I
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(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                ADY10946 standard; protein; 312 AA. Plant full length insert polypeptide seqid 66761.
                                                                                                                                                                                                                       US2004034888-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADY11546 standard;
ABB53675 standard; protein; 325 AA
                                                                                                                                                                                                                                       ADY11115 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                            ADY09462 standard;
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(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
                                                                                                                                                       (SCRE/) SCREEN S E.
(TABA/) TABASKA J E
(CAOY/) CAO Y.
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KOVALIC D K.
SCREEN S E.
TABASKA J E.
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SCREEN S E.
TABASKA J E.
CAO Y.
                                                                                 LIU J.
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25.3%;
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polypeptide segid 66745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptide seqid 67361.
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No. 26;
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No. 26;
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No. 26;
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Best Local S
RESULT 1020
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RESULT 1016
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                                                                                                                                                                                                                                   ABP81865 standard; protein; 389 Human oxytocin receptor protein w0200261087-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAR37264 standard; protein;
Oxytocin receptor.
EP542424-A1.
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Enterococcus faecalis polypeptide #2037.
US6617156-B1.
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Enterococcus faecalis polypeptide #2157.
US6617156-B1.
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                                                                                                                                              AAE38317 standard; protein; 389 AA.
Human oxytocin receptor protein.
WO2003064402-A1.
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EP811684-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ROHT ) ROHTO PHARM CO LTD.

ry Match
t Local Similarity 24.5%;
                                              ADF12125 standard; protein; Human oxytocin receptor (OX; WO2003093816-A2.
                                                                                                               (PFIZ ) PFIZER LTD. (PFIZ ) PFIZER INC.
                                                                                                                                                                                                                           08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                           (ROHT) ROHTO PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW23832 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (DOUC/) DOUCETTE-STAMM L A. (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INRG )
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                                                                                                                                                                                                                                                                                                     (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                 AAM40217 standard;
                         (FARB ) BAYER AG.
    Local Similarity
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h
6.1%; Score 72.5;
Similarity 25.9%; Pred. No. 27;
                                                                                                                                                                                                                                                                                                                                                                                                                            rd; protein; receptor.
                                                                                                                                                                                                                                                                                                                                      ; protein; 389 AA. SEQ ID NO 3362.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.1%;
21.5%;
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24.5%;
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(OXTR) p
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Pred. No. 35;
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Pred.
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No. 31;
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No. 35;
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Query Match
Best Local S
RESULT 1029
ID ADM1976
DE Bacter
PD 18-D'
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  RESULT 1030
ID ADV8911
DE Strepto
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RESULT 1025
ID AAR58665 standard;
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RESULT 1023
ID ADO29590 standard;
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Best Local
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05-OCT-1994.
(TAKE) TAKEDA CHEM IND LTD.
6.1%;
ery Match 6.1%;
29.6%;
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'Affiliation (TAKE) TAKEDA CHEM IND LTD.

(TAKE) TAKEDA CHEM IND LTD.

6.1%;

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''m'(larity 29.6%;
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05-OCT-1994.
(TAKE) TAKEDA CHEM IND LTD.
6.1%;
ery Match 6.1%;
29.6%;
                                                                                                                  (HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B S.
                                                                                                                                                                                                                                                             ADN19765 standard; protein;
Bacterial polypeptide #2418
US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAR58655 standard; protein; 513 AA. Bovine PACAP receptor type 1A protein. EP618291-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAR58657 standard; protein; 485 AA. Bovine PACAP receptor type 1B protein EP618291-A2.
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Bovine PACAP receptor type 1B mature protein.
EP618291-A2.
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ADV89115 standard; protein; 666 AA. Streptococcus agalactiae protein sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAR58663 standard; protein; 476 AA.

Bovine PACAP receptor type 1A mature
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(UYMO-) UNIV MONTREAL CENT HOSPITALIER.
(UYMO-) 1 MONTREAL CENT HOSPITALIER.
F. Local Similarity 24.5%; Pred. No.
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(TAKE ) TAKI
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(PRIM-) PRIMAL INC
                                                                        Local Similarity
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Similarity 29.6%;
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A UK LTD.
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24.5%;
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24.5%;
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22.5%;
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Pred.
                                                                        Score
Pred.
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Pred. No.
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Pred. No. 52;
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No. 43;
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No.
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47;
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35;
                                                              2.5;
53;
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48;
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Best Local Similarity
RESULT 1038
ID Anwarr
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Best Local Similarity
RESULT 1033
                                                                                                                                                             Best Local Similarity RESULT 1037
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                          Protein encoded 1 W0200277183-A2. 03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              O2002.
21-NOV-2002.
(INSP) INST PASTEUR.
(CNRS) CNRS CENT NAT RECH SCI.
(CNRS) CNRS CENT NAT RECH SCI.
6.1%; Score
Match 1 **ity 23.1%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ROOS/) ROOS J.
(STAU/) STAUDERMAN
(VELI/) VELICELEBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Streptococcus agalactiae protein, & WO200292818-A2.
                                                                                                                                                                                                                                                                                                                AAE31528 standard; protein; 848 Arabidopsis thaliana protein use WO200281696-A2.
                                                                                                                                                                                                                                                                                                                                                                                                       ABB05429 standard; protein; 848 AA
Arabidopsis thaliana ABH1 protein;
WO200196585-A2.
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(CNRS) CNRS CENT NAT RECH SCI.
6.1%; Score
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31-OCT-2002.
  ADW76078 standard; protein; 1051 AA
                                                                                                                                      ADY10144 standard; protein;
Plant full length insert pol
                                                                                                                                                                                                (ELIT-) ELITRA PHARM INC.
                                                                                                                                                                                                                                 ABU25159 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                                                                                                    20-DEC-2001
(REGC ) UNIV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Streptococcus agalactiae protein, WO200292818-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADV80368 standard; protein; 666 AA
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(CNRS ) CNRS CENT NAT RECH
                                                                                                                             US2004034888-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADI81620 standard;
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                                                        (KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
                                                                                            LIUJ/) LIU J.
ZHOU/) ZHOU Y.
                                                                                                                                                                                                                                                                    SYNGENTA PARTICIPATIONS AG.
h 6.1%; Score
Similarity 22.3%; Pred.
                                                                                                                                                                                                                                                                                                                                                           UNIV CALIFORNIA.
6.1%;
h
Similarity 22.3%;
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6.1%; Score '
23.1%; Pred. 1
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20.2%;
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similar to Pfam PF00023
                                                                                                                                                                                                                                  protein; 851
Prokaryotic (
                      6.1%;
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20.5%;
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No. 1
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No. 1e+
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No. 74;
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No. 74;
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No. 74;
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No. 1e+02;
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No.
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5. le+02;
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RESULT 1042
ID ABU394:
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PN W02002:
PD 03-0CT
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ID AI
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                   RESULT 1047
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                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                  AAB53392 standard; protein; 334 AA. Human colon cancer antigen protein WO200055351-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Listeria monocytogenes WO200177335-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JUL-2004.
(ASAH-) ASAHI KASEI PHARMA CORP.
ry Match
--- cimilarity 20.8%; Pre
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12-MAY-1993.
(SANW ) SANWA KAGAKU KENKYUSHO CO.
6.1%; Score
ry Match 23.7%; Pred.
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EP541089-A2.
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Human hepatitis C
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                                                                                                                                                                                                                                                                                                                                                                                      ABU39432 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB48543 standard; protein; 306 AA.
Listeria monocytogenes protein #1247.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            T cell activation associated protein #278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADQ96378 standard; protein; 208 AA
                                                                 ABU19932 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                           H. pylori inner membrane WO9640893-A1.
                                                                                                                                                                                                                                         AAY87505 standard; protein; 370 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2004058805-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2005007689-A1.
ABG25051 standard; protein; 414 AA.
Novel human diagnostic protein #25042.
                                                                                                                                                              AAW20731 standard;
                                                                                                                                                                                                                                                                               (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                    18-OCT-2001.
(INSP ) INST PASTEUR.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-JAN-2005
                                                                                                                                   19-DEC-1996
                                                                                                                                                                                                    (MILL-) MILLENNIUM PHARM INC.
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                                                                                                                         ASTR ) ASTRA AB
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1045
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                                              T-) ELITRA PHARM INC.
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virus gene
                                                                                                                                                                                                                                                                                                                                                                                     protein; 317 AA.
Prokaryotic essential
                                                                          protein; 396 AA.
Prokaryotic esse
                                                                                                                                                              protein;
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19.3%;
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23.5%;
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28.8%;
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21.0%;
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21.8%;
                            6.0%;
21.6%;
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20.9%;
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Pred.
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encoded
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Pred.
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17;
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30;
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                                     Length 396;
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                                                                                                                                                                                                                                                                                                              NO:932
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Best Local Similarity
RESULT 1049
ID AMGENCE
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RESULT 1050
ID ABM72825 standard; p
DE Staphylococcus aureu
PN W020029486-A2.
PD 28-NOV-2002.
PA (CHIR-) CHIRON SPA.
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Best Local Similarity
RESULT 1048
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                                                                                               Best Loca
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RESULT 1054
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EP1033405-A2.
                                                                                                                                                                                                                                                                                          Thale cress protein upregulated W02004035798-A2.
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Pathogen specific a
WO200259148-A2.
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                                                                             AAG16337 standard;
                                                                                                                                                                  Arabidopsis thaliana EP1033405-A2.
                                                                                                                                                                                                   AAG16338 standard; protein;
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RESULT 1062

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ID ABU25738 standard; p
DE Protein encoded by F
PN W0200277183-A2.
PD 03-OCT-2002.
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ID ARBIG336 standard; protein; 5

DE Arabidopsis thaliana protein
PN EP1033405-A2.
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W0200281087-A2.

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(LIFE-) LIFESPAN BIOSCIENCES II

(LIFE-) G.0%; S.

Match Tarity 20.8%; I
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W02003087768-A2.
23-OCT-2003.
(MITO-) MITOKOR.
(BUCK-) BUCK INST AGE RES.
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(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                               ABP81969 standard; protein;
Human GPCR XPR1 protein SEQ
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Tumour-associated
WO2003024392-A2.
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WO2003024392-A2.
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Bacterial polypeptide #12601.
US2003233675-A1.
                    Human xenotropic&
WO2003072824-A1
                                     ADB67652 standard; protein;
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(INSP ) INST PASTEUR.
(CNRS ) CNRS CENT NAT RECH 9
                                                                            AAY70066 standard;
Recombinant fusion
WO200008469-A1.
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Recombinant fusion
WO200008469-A1.
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03-OCT-2001
(BODA-) BODAO GENE TECHNOLOGY CO LTD
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EP1130094-A2.
       AAM93791 standard;
Human polypeptide,
                                                         (AGOU-) AGOURON
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8: RY Match 6.0%;

t Local Similarity 23.6%;
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P. falciparum DNA polymerase protein
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pHCAP-4 polyprote
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2; DB 5; Length
o. 1.1e+02;
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2.1e+02;
                                                                                                                      DB 3;
4.8e+02;
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99;
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95;
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Query Match
Best Local S
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Best Local
RESULT 10
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Best Local Similarity
RESULT 1083
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Best 1
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Meloidogyne incognita p

US2003150017-A1.

07-AUG-2003.

(MESA/) MESA J R B.

(GRAH/) GRAHAM M W.

(FAIR/) FAIRBAIRN D J.
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(REAS-) RES ASSOC BIOTECHNOLOGY.
6.0%; Score
                                                                                                             (FEDE/) FEDER J N. (MINT/) MINTIER G. (RAMA/) RAMANATHAN C (HAWK/) HAWKEN D R.
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(INRG ) INRA INST NAT RECH AGRONOMIQUE.
INTO MATCH 6.0%; Score 71.5
Y Match 26.5%; Pred. No.
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WO9815289-A1.
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             AAR88410 standard;
High-affinity melau
WO9535320-A1.
                                                                                                                                                                                                 Ovine ML1A protein US2004161823-A1.
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                                                                                                                                                                                                                              ADR40542 standard; protein;
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                             dard; protein; 366 AA. melatonin-la receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d; protein;
associated
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ita plk1 protein
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22.2%; P
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25.2%;
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25.2%;
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23.1%;
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n fragment
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herpesvirus
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Pred. No. 19;
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Query Match
Best Local Similarity
RESULT 1084
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Human EDG-1 protein.
US2002155512-A1.
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          Cancer/angiogenesis/fibrosis-related W02003042661-A2.
                                                                                              ADC40477 standard; protein; Protein of human EDG-1.
                                                                                                                                                           ADB67662 standard;
Human EDG1, SEQ ID
WO2003072824-A1.
                                                                                                                                                                                                                                  Human sphingolipid WO200261087-A2.
                                                                                                                                                                                                                                                                                                        ABR59701 standard;
Human endothelial owo2003029277-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABP58069 standard;
                                                 (TAKE ) TAKEDA CHEM IND LTD.
xy Match 6.0%;
t Local Similarity 22.3%;
                                                                                    Protein of human WO2003052096-A1.
                                                                                                                                                                                                                         08-AUG-2002
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                                                                                                                                                                                                                                                                                        (RIGE-)
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                                                                                                                                         (SANY ) SANKYO CO
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BIOTECHNOLOGY INC
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22.3%;
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22.3%;
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No. 45;
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Query Match
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Best Local S'
RESULT 1099
ID ADN1961/
DE Bacter
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PD 18-D'
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Best Loc.
RESULT 1094
ID ADJ455/
DE LXR-J
PN US2'
PD 05
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Best Local Similarity
RESULT 1097
ID ADZ12975 standard; p
DE Human cancer-associa
PN W02005031001-A2.
PD 07-AFR-2005.
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Best Local
RESULT 1095
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ID AD
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Best Local Similarity
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Best Local Similarity
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02-SEP_2004.
(SAGR-) SAGRES DISCOVERY INC.
(SAGR-) 6.0%;
Pry Match 6.0%;
22.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human cancer associated prot WO2004074321-A2.
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                                                                                                                                                                                                                                 Human cancer-associated WO2005031001-A2.
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(SAGR.) SAGRES DISCOVERY.
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ry Match 6.0%;
22.3%;
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                                       Catostomus commersoni
WO200192296-A2.
                                                           ABB05226 standard;
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(GETH ) GENENTECH INC.
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GOLDMAN B
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Pred. No. 45;
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Query Match
Best Local Similarity
RESULT 1109
ID ABU16392 standard; p
Protein encoded by F
PN WO200277183-A2.
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ID ADM8314
DE Rat ves
PN US20031
PD 18-SEP-
PA (INCY-)
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RESULT 1102
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RESULT 1107
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Best Local Similarity
RESULT 1105
ID ABP75877 standard;
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(LIUJ/) LIU J.
(ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rat vesicle membrane protein US2003175787-Al.
                                                                                                                                                                                                                                                                                         Human secretory polypeptide WO200283876-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Partial M17 antigen W09203457-A. 05-MAR-1992.
                                                     (HUMA-) HUMAN GENOME
                                                                                                                                                                                                                        Protein encoded WO200277183-A2.
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EXTY MATCH 6.0%;

St Local Similarity 22.4%;
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                                                                                 AAW51244 standard; protein;
Human calcitonin receptor.
                                                                                                            (MILL-) MILLENNIUM PHARM INC. ry Match 6.0%; t Local Similarity 22.4%;
                                                                                                                                                Human breast cancer WO2003000012-A2.
                                                                                                                                                                  ABJ37074 standard; protein;
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                                                                                                                                                                                                                                 ABU26033 standard;
Protein encoded by
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Plant full length i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (REGC ) UNIV CALIFORNIA
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Prokaryotic essential
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Prokaryotic (
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Region
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an cancer
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                                                                                              (ROZE/) GRAVEL R A.
(ROZE/) ROZEN R.
(LECL/) LECLERC D.
(WILS/) WILSON A.
(ROSE/) ROSENBLATTOR
                                    ADM43213 standard; I
Human methionine syi
US2003082676-A1.
01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                    (GRAV/) GRAVEL R A. (ROZE/) ROZEN R. (LECL/) LECLERC D. (WILS/) WILSON A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Staphylococcus aureus WO200294868-A2.
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Human methionine synthase re
US2003082676-A1.
                                                                                                                                                                                                                               ABG00883 standard; protein; Novel human diagnostic prote WO200175067-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                            Human methionine synthase reductase
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                                                                                                                                                                                                             (HYSE-) HYSEQ INC.
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(UYMC-) UNIV MCGILL
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3/) ROZEN R.
L/) LECLERC D.
       ROZEN R.
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h 6.0%;
Similarity 21.3%;
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WILSON A
                          GRAVEL R A.
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Pred. No. 85;
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No. 1e+02;
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No. 1e+02;
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85;
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1e+02;
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Query Match
Best Local Similarity
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RESULT 1124
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RESULT 1122
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADQ39857 standard; protein; 698 AA. Human myocardial infarction-associated WO2004058052-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human wild-type |
US2003082676-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADM43207 standard;
                                                                                                                                                                                               ABB78282 standard; protein; 
Amino acid sequence of human
WO200263307-A2.
                                                                                                                                                                                                                                                                                                                                                                                Novel bronchial cancer-associated DE10316701-A1.
                          ADF69127 standard;
Human MP53 protein
WO2003083047-A2.
                                                                                    (GEHO ) GEN HOSPITAL (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                       Human wm1 protein.
DE19845277-C1.
09-MAR-2000.
                                                                                                                                                                                                                                                                                                                                         (HINZ/) HINZMANN B.
(HERM/) HERMANN K.
(CAST/) HEIDEN CASTANOS-VELEZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-JUL-2004
                                                                                                                   Human Protein 07
W02003016475-A2.
                                                                                                                                      ADD46013 standard;
                                                                                                                                                                                                                                                                                                    AAY51606 standard;
                                                                                                                                                                                                                                                                                                                                                                                                    ADU06586 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADQ39858 standard; protein;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GRAV/) GRAVEL R A. (ROZE/) ROZEN R.
                                                                                                                                                                              (PHAA)
                                                                                                                                                                                                                                                           (UYMU-) UNIV MUENCHEN MAXIMILIANS LUDWIG.
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:h 6.0%;
Similarity 23.8%;
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         INC.
                                   protein;
sequence
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k; Pred. No. 1.
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n wolframin
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Pred. No. 1.
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No. 1
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No. 1.
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No.
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No. le+02;
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L.5e+02;
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.1e+02;
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.5e+02;
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.5e+02;
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Query Match
Best Local s
RESULT 1131
ID AAU070
DE Huma'
PN W07
PD 2'
PA 2
        Query Match
Best Local Similarity
RESULT 1133
ID ABP82018 standard; p:
DE Human GPCR CELSR2 pro
PN W0200261087-A2.
PD 08-AUG-2002
PA (LIFE-) LIFESPAN BIOS
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RESULT 1129
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Best Local Similarity
RESULT 1132
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RESULT 1126
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31-JUL-2003.
(INCY-) INCYTE GENOMICS INC.
6.0%;
3ry Match 6.0%;
22.4%;
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Human beta-amyloid
WO2005023858-A1.
                                                                                                                      AAM50866 standard; protein; Cadherin EGF LAG seven-pass WO200208765-A2.
                                                                                                                                                                              WO200161003-A1.
23-AUG-2001.
(SMIK) SMITHKLINE BEECHAM
                                                                                                                                                                                                              AAU07054 standard; protein; 2923 F
Human Flamingo protein encoded by
                                                                                                                                                                                                                                                                                 ABU11556 standard; protein;
Human MDDT polypeptide SEQ
W0200279449-A2.
                                                                                                                                                                                                                                                                                                                                                                ABB11404 standard; peptide;
Human FLAMINGO 1 homologue,
WO200157188-A2.
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Human ORFX ORF1956
WO200058473-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human nicastrin/Psen2-complex WO2005023833-A2.
                                                                                       31-JAN-2002.
(STRD ) UNIV STANFORD.
(GENO-) APPLIED GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADL22689 standard; protein; Human disease detection and WO2003062379-A2.
                                                                                                                                                                                                                                                                                                                                             (HYSE-) HYSEQ INC.
                                                                                                                                                                                                                                                                                                                                                                                                                            05-OCT-2000.
(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                             (INCY-) INCYTE GENOMICS INC.
                                      ABP82018 standard; protein; 2923 AA.
Human GPCR CELSR2 protein SEQ ID NO:524
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BIOSCIENCES 6.0%;
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ID 503.
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G-type receptor
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treatment (MDDT)
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SEQ ID NO:1774.
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Pred. No. 7.5e+02;
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member,
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.6.3e+02;
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.5e+02;
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.8e+02;
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.2e+02;
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.6e+02;
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Best Local Similarity
RESULT 1140
ID ADY70652 standard; p
DE Human BACE1/PTK7-com
PN W02005023833-A2.
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Best Local Similarity
RESULT 1139
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Query Match
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(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.
(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.
6.0%; Score 71.5; DB 7;
ery Match
6.0%; Score 71.5; DB 7;
ery Match
22.4%; Pred. No. 7.6e+02;
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                                                                                                                                                                                                                                                                                                  ADO29245 standard;
Human GPCR CELSR2,
WO2004040000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADC15499 standard;
Human cadherin EGF
US203086934-A1.
                                                                                                                                                                                                            ADY70314 standard;
Human beta-APP, ca
WO2005023858-A1.
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                                          ADY70648 standard; protein; 2923 AA.
Human BACE1-complex, cadherin seven-
                                                                                                                                 ADY70652 standard; protein; 2923
Human BACE1/PTK7-complex member,
                                                                                                                                                                                                                                                                              (PRIM-) PRIMAL INC.
                                                                                                                                                                                                                                                                                                                                                                                                    ADE54411 standard;
Human Protein XP_0
WO2003016475-A2.
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Human Protein XP_042739, SE
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           17-MAR-2005
(CELL-) CEL
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BROWN P O.
PEROU C M.
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                                                                                                  CELLZOME AG
            CELLZOME
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P_042739, SEQ
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cadherin EG
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SEQ ID NO:346.
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SEQ ID NO:932.
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LAG seven-pass
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SEQ ID NO 2
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seven-pass
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.6e+02;
                                                                                                                                                                                                                                                                                                                                               DB 7;
.6e+02;
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.6e+02;
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.6e+02;
                                             G-type
                                                                                                                                                                    DB 9;
.6e+02;
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RESULT 1146
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                                                                       RESULT 1150
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Best Local
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WO200161003-A1.
23-AHG-200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HCV polymerase protein #11. WO2005012502-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human REPTR 9 p
WO200198354-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAR34468 standard; protein; 3011 Encoded by full-length Hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADX40788 standard; protein; 3010 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAU74826 standard;
                                                                                                                        Coronavirus membrane WO2004096842-A2.
                                                                                                                                                                              26-DEC-2001.
(BODE-) BODE GENE DEV CO LTD
                                                                                                                                                                                                                ABB06793 standard; protein; 198 AA.
Human transmembrane 4 protein 22 SEQ
                                                                                                                                                                                                                                                                                     WO200171042-A2.
                                                                                                                                                                                                                                                                                                Drosophila melanogaster
                                                                                                                                                                                                                                                                                                         ABB67866 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                      Hepatitis C v: WO9300365-A2.
                                                                                                                                                                                                                                                                                                                                                                                        AAR31621 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Encoded by full-length JP05068562-A.
                                         WO2003029423-A2
                                                                                                                                          ADU08919 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (SMIK ) SMITHKLINE BEECHAM PLC.

ry Match 6.0%; Score
Local Similarity 22.4%; Pred.
                                                                                                                                                                                                                                                                                                                                                  (CHIR ) CHIRON CORP
                                                                                                   (BCCA-) BC CANCER AGENCY.
                                                                                                                                                                                                                                                                 PEKE ) PE CORP NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EPIM-)
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                                                            ABR58398 standard;
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                                                                                ocal Similarity
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h 6.0%; Score
Similarity 23.7%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INCYTE GENOMICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EPIMMUNE INC.
                     CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                               C virus
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                                                                                                                                                                                                                                                                                                                                                                               (HCV) poly
                                                            protein;
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23.7%;
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22.4%;
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24.5%;
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29.5%;
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22.8%;
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                                                                                                                                protein
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polyprotein.
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polypeptide
                                                                                                                                223 AA.
n seqid
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Pred.
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Score 71;
Pred. No.
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Pred.
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Pred. No. 7.9e+02;
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C virus
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No. 1.
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No.
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5. 7.7e+02;
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24;
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21;
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DB
27;
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.9e+02;
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.7e+03;
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.9e+02;
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Best Local
RESULT 1152
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RESULT 1158
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Best Local Similarity
RESULT 1154
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                            ADY08080 standard; I
Plant full length in
US2004034888-A1.
19-FEB-2004.
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IT-MAR-1994.

(UYNY) UNIV NEW YORK STATE.

5.9%;

ery Match
5.9%;

19.7%;
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                                                                                                                                                                                                                                                                                                                                                                             AAR48717 standard; protein; 312 AA.
G-protein coupled human interleukin-8
WO9405695-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human olfactory WO200127158-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAG72952 standard; protein; 310 AA.
AAG72952 standard; protein; 310 AA.
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Plant full length i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CHIR-) CHIRON SPA. (GENO-) INST GENOMIC
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                                                                                                                              WO200127158-A2.
                                                                                                                                     AAG72377 standard; protein; 312
Human OR-like polypeptide query
                                                                                                                                                                                     (YEDA ) YEDA RES
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                                                                                                                                                                                                                           AAG72169 standard; protein; 312 AA.
Human olfactory receptor polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                       (YEDA ) YEDA RES & DEV CO LTD.
                                                                                             (YEDA ) YEDA RES &
                                                                                                                                                                                                                                                                             (UYNY ) UNIV NEW YORK STATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIUJ/) LIU J.
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LIU J.
ZHOU Y.
KOVALIC D
                                                                             Similarity
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                                                                                                                                                                                      & DEV CO LTD.
                                                                                                & DEV CO LTD
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                                              ; protein; 364 AA.
insert polypeptide
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22.9%;
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18.7%;
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39;
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39;
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38;
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Query Match
Best Local Similarity
RESULT 1159
ID ABREATT
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Best Local Similarity
RESULT 1162
ID ADJOS:
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Best Local Similarity
RESULT 1166
ID ADW87442 standard;
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RESULT 1161
ID ADL05302 standard;
                                      Best Local Similarity RESULT 1167
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(GENO-) GENOME THERAPEUTICS (GENO-) GENOME THERAPEUTICS 5.9%;
2ry Match 5.9%;
38.0%;
numan secreted protein SEQ 1
WO2004035732-A2.
                                                                                  ADW87442 standard; protein; 448 AA. Drosophila melanogaster CBL-B. W02005007141-A2.
                                                                                                                                                                           ADU69155 standard; protein; Fruit fly CBL-B protein.
                                                                                                                                                                                                                                              ADU73808 standard; protein; 448 AA. Drosophila melanogaster Cbl-b. WO2004099388-A2.
                                                                                                                                                                                                                                                                                                                          ADJ95144 standard;
Novel NOVX protein
WO2003040325-A2.
                                                                                                                                                                                                                                                                                                                                                                                                          Novel NOVX protein sequence WO2003040325-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADL05302 standard; protein; 4
M. catarrhalis protein #1068.
US6673910-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABB48413 standard; protein; Listeria monocytogenes prote WO200177335-A2.
                                                                                                                                                        WO2004098492-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lactococcus lactis
FR2807446-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-OCT-2001.
(INSP ) INST PASTEUR.
                                                                  (PROT-) PROTEOLOGICS
                                                                                                                                                                                                                           (PROT-) PROTEOLOGICS
                                                                                                                                                                                                                                                                                                                                                                                                                              ADJ95142 standard; protein;
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ry Match 5.9%; Score 71;
t Local Similarity 20.3%; Pred. No.
                                                                                                                                               (PROT-) PROTEOLOGICS
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(CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                      (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2003
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protein ykiI.
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5.9%;
23.5%;
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23.5%;
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21.0%;
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23.5%;
                                                                                                                                               INC.
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21.0%;
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18.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ein; 423 AA.
protein #1117.
                  ; 455 AA.
ID #184.
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: #185.
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#186.
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48;
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64;
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63;
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63;
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Best Local Similarity
RESULT 1170
ID AAP37777
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Best Local Similarity
RESULT 1175
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Best Local Similarity
RESULT 1173
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Best Local Similarity
RESULT 1172
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Best Local Similarity
RESULT 1169
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           US6383762-B1.
07-MAY-2002.
(SYNA-) SYNAP:
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(FIVE-) FIVE PRIME THERAPEUTICS INC.
5.9%; Score 71;
ery Match 24.3%; Pred. No.
                                                                                                                                                                                            Human G protein-coupled receptor 5HT-2A W0200022129-A1.
                                                                                                                                                                                                                                                                                                                                                                                                     AAW23781 standard; protein; 471 AA.
Human serotonin 5-HT2 receptor prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence encoded WO9311257-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protein encoded WO200277183-A2.
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Protein encoded by
                                        ABB07978 standard;
Human 5-HT2 recepto
                                                                                                                          AAY90675 standard; protein; 471 AA.
Human mutant G protein-coupled rece
                                                                                                                                                                               (AREN-) ARENA PHARM
                                                                                                                                                                                                                                                               (TEIT/) TEITLER M.
(HERR/) HERRICK-DAVIS
(EGAN/) EGAN C C.
                                                                                                                                                                                                                                                                                              WO9838217-A1.
                                                                                                                                                                                                                                                                                                                   AAW77107 standard; protein; 471 AA
Human 5-HT2A serotonin receptor.
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ry Match 5.9%;
t Local Similarity 23.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RUSS/) RUSSO J F. (THOM/) THOMSEN W J.
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Human endogenous 5HT2A serotonin
US2003224442-Al.
                                                                                                                 WO200022129-A1.
                                                                                                                                                                                         20-APR-2000
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(CHAL/) CHALMERS
(LIAW/) LIAW C W.
                                                                                            (AREN-) ARENA PHARM INC
                                                                                                        20-APR-2000
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 Match
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           SYNAPTIC
                                    receptor sequence
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RESULT 1177
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RESULT 1176
ID ABP81765 standard; p
DE Human 5-HT2A recepto
PN W0200261087-A2.
PD 08-AUG-2002.
RESULT 1184
ID ADQ3980
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PN WO20040
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(AREN-) ARENA PHARM INC.
5-9%;
FOR MATCh 5-9%;
23.7%;
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(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D
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Human serotonin 5HT_2A.
US2003105292-A1.
05-JUN-2003.
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US2003170723-A1.
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Human serotonin 2A
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(LIFE-) LIFESPAN BIOSCIENCES
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(AREN-) ARENA PHARM
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                                                                                ADO29506 standard;
Human GPCR HTR2A,
                                                                                                                                                Human serotonin receptor 5HT2a.
US2003167476-A1.
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(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D
                                                                                                                                                                                                                                                                                                                                              Mutated human serotonin
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           Human myocardial infarction-associated
                                                                        WO2004040000-A2.
                                                                                                                                                                   ADL90125 standard; protein;
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                   ADQ39800 standard;
                                                      (PRIM-) PRIMAL INC
                                                              3-MAY-2004
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           protein,
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Query Match
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RESULT 1185
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Amino acid sequence of the hu
US5885785-A.
23-MAR-1999.
(SYNA-) SYNAPTIC PHARM CORP.
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US2004229287-A1.
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(UYCO) UNIV COLUMBIA NEW YORK.
5.9%; Score
sry Match 23.7%; Pred.
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                                                                                                                                                (INSP )
                                                                                                                                                                                                                                                        ABG70577 standard; protein; 480 AA. Human serotonin (5-HT2) receptor. US200209848-A1.
                                                                                                                                                                              Photorhabdus lu
WO200294867-A2.
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Human 5-HT 2a receptor protein SeqID22.
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Human myocardial infarction-associated
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                                                                        WO2003016475-A2.
27-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2005012254-A1.
ADD48660 standard; protein; 5
Rat Protein BAA25372, SEQ ID
                                                  (GEHO ) GEN HC
(FARB ) BAYER
                                                                                            ADE56383 standard; protein; 545 AA.
Rat Protein 070536, SEQ ID NO 2235.
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ry Match 5.9%;
t Local Similarity 23.7%;
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BEST LOCA.

RESULT 1196
ID ABP35/
DE FW'
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PN
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Best Local Similarity
RESULT 1198
ID AEB36506 standard; p.
DE L. pneumophila prote
PN W02005049642-A2.
PD 02-JUN-2005.
PD 02-JUN-2005.
PA (INSP) INST PASTEUR
PA (INRM) INSERM INST PA (UYLY-) UNIV LYON 1 PA (UYLY-) UNIV LYON 1 PA (CNRS) CNRS CENT NA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1194
ID ADS4158
DE Bacteri
PN US20012
PD 18-DEC
PA (CAOY)
PA (HINK)
PA (SLAT)
PA (GOLD)
                                                                                                         RESULT 1200
ID AD09637
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
ID AA
                                                                                                                                                                                         Best Local Similarity
RESULT 1199
ID ADQ96374 standard;
DE T cell activation a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity RESULT 1195
                                   Query Match
Best Local :
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Best Local :
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31-OCT-2002.
(ELIT-) ELITRA PHARM INC.
ry Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CAOY) CAO Y.
(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
(CHEN/) CHEN X.
                                                                                ADQ96376 standard;
T cell activation a
WO2004058805-A2.
                                                                                                                         15-JUL-2004.
(ASAH-) ASAHI KASEI PHARMA CORP.
xy Match
5.9%; Sco
2.001 Similarity 21.3%; Pre
                                                                                                                                                                            ADQ96374 standard; protein; 631 AA. T cell activation associated proteiw0200458805-A2.
                                                                                                                                                                                                                                                                                                            AEB36506 standard; protein; L. pneumophila protein SEQ WO2005049642-A2.
                                                                                                                                                                                                                                                                                                                                                  10-AUG-2000.
10-AUG-2000.
(CHUG-) CHUGAI RES INST MOLECULAR MEDICINE
5.9%; Score 71; DB
xy Match
5.9%; Pred. No. 88;
                                                                                                                                                                                                                                                                                                                                                                                                       AAB20578 standard; protein; 564 AA Mouse OCTN3 protein SEQ ID NO:1. W0200046368-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADS43584 standard; protein; 5
Bacterial polypeptide #22014.
US2003233675-A1.
                                                                                                                                                                                                                                             O2-JUN-2005.

(INSP) INST PASTEUR.

(INRM) INSERM INST NAT SANTE & RECH MEDICALE.

(UYLY-) UNIV LYON 1 BERNARD CLAUDE.

(CNRS) CNRS CENT NAT RECH SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABP35686 standard;
Fungal ZBC protein
WO200224865-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (GEHO ) GEN HOSPITAL (FARB ) BAYER AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003016475-A2
27-FEB-2003.
ABB91532 standard; protein; 676 AA
Herbicidally active polypeptide SE
                                                          L5-JUL-2004.
(ASAH-) ASAHI KASEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MICR-) MICROBIA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
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                                                                                            protein; 631 AA. associated protein
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                                  5.9%; Score 21.3%; Pred. 1
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19.1%;
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18.3%;
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23.1%;
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26.2%;
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22.0%;
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                                                                                                                                                                                                                                                                                                                        ; 603 AA.
ID NO 838.
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#112.
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                                                                                                                                Score 71;
Pred. No.
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Pred.
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Pred.
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gene
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1e+02;
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97;
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87;
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Best Local Similarity RESULT 1202
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Best Local Similarity
RESULT 1208
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RESULT 1205
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Drosophila melanogaster polypeptide
W0200171042-A2.
27-SEP-2001.
(PEKE) PE CORP NY.
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Human HIPHUM 00000;
GB2365432-A.
                                                                                                                          AAR30616 standard;
Polypeptide coded
EP521318-A2.
                                                                                                                                                                                               Rice abiotic stress
WO2003008540-A2.
30-JAN-2003.
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                                        JP06105690-A.
                                                 Blood transmiscible
                                                             AAR53417 standard;
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Human neurotransmitter trans
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                    (KAEN/) KAENNO
                                                                                                       (LUCK-) LUCKY
                                                                                                                                                                                                                               ABM90462 standard; protein;
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(FEDE/) FEDER J N.
(LEEL/) LEE L M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                                                       (SYGN ) SYNGENTA PARTICIPATIONS AG.
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(RAMA/) RAMANATHAN C
Local Similarity
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by Korean
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e NANBHV 1
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responsive polypeptide
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20.6%;
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17.7%;
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24.3%;
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transporter.
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HCV full
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1.3e+02;
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1.3e+02;
DB 2;
9e+02;
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9e+02;
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1.8e+02;
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RESULT 1213
ID ABR835
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PN WO2003
PD 17-JUL
PA (UYNE-)
                                                    Query Match
Best Local S
RESULT 1218
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                                                                                                                                                    (ALLE/) ALLEN S M.
(HITZ/) HITZ W D.
(KINN/) KINNEY A J.
(TING/) TINGEY S V.
                                                                                                                                                                                                                                                                       AAU97208 standard;
Portion of a wheat
US6383776-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                       ABR83573 standard; protein; BcrC amino acid sequence SEC WO2003057708-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADX40812 standard; protein; HCV polymerase protein #35. W02005012502-A2.
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HCV polymerase protein #40.
WO2005012502-A2.
10-FEB-2005.
                                                                                                ADG47920 standard; protein; Wheat Arabidopsis-like sugar US2002199217-A1.
                                                                                                                                                                                                                                                                                                                                      AAU01287 standard; protein; 218 AA. Brassica napus fatty acid desaturase, WO200125453-A2.
                          ABU17430 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                               Wheat sugar transport US2002178468-A1.
                                                                                                                                                                                                                   ABU08333 standard;
                                                                                                                                                                                                                                                                                                            (MIAC ) CANADA MIN AGRIC & AGRI-FOOD CANADA.
ry Match 5.9%; Score 70.5; DE
t Local Similarity 29.3%; Pred. No. 27;
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                                                                               (HELE/) HELENTJARIS
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         ELITRA PHARM
                                   protein; 275
Prokaryotic
                                                            5 T G.
5.9%;
21.6%;
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9e+02;
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9e+02;
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9e+02;
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RESULT 1225
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RESULT 1220
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RESULT 1226
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RESULT 1223
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RESULT 1222
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          Query Match
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                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADY06253 standard; protei
Plant full length insert
US2004034888-A1.
19-FEB-2004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABB05467 standard; protein; 291 AA. Coriolus versicolor aldo/ketoreductase JP2001321171-A.
                           ADH72226 standard; protein;
Human protein of the invent:
WO2003102155-A2.
                                                                                                                                                                                                                                                                                                                                                           Acinetobacter baumannii
US6562958-B1
13-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FR2807446-A1.
12-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABB55033 standard;
                                                                                                                  ADK68232 standard;
Novel NOVX protein
WO2003085124-A2.
                                                                                                                                                                                                         Human receptor &
                                                                                                                                                                                                                                                           (INSP ) INST
(CNRS ) CNRS
                                                                                                                                                                                                                                                                                        Photorhabdus luminescens WO200294867-A2.
                                                                                                                                                                                                                                                                                                            ABM70358 standard;
                                                                                                                                                                                                                                                                                                                                                  (GENO-) GENOME THERAPEUTICS
                                                                                                                                                                                        WO2003104395-A2.
18-DEC-2003.
                                                                                                                                                                                                                    ADH22355 standard;
                                                                                                                                                                                                                                                                               28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                       ADA35787 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                              (WARI/) WARIISHI H. (KUBI ) KUBOTA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (INRG )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lactococcus
                                                                                                 (CURA-) CURAGEN CORP.
                                                                                                                                                                             (INCY-) INCYTE CORP.
                     (CURA-)
                                                                                                                                                       Local Similarity
                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                             ocal Similarity
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                                                                                                                                                                                                                              185.
2002.
) INST PASTEUR.
) CNRS CENT NAT RECH SCI
5.9%; §
2+v 19.2%;
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h 5.9%; Score 70.5;
Similarity 26.1%; Pred. No. 39;
 Similarity
                    CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LIU J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lactis
                                                                                                                                                                                                         d; protein; 330 AA. membrane associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein;
                                                                                                                              protein;
#79.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 protein; 285 protein malG.
                                                                                                                                                                                                                                                                                                             protein;
                                                                                                                                                                                                                                                                                                                               5.9%;
24.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.9%;
27.4%;
                                                                                                                                                                                                                                                                                                                                                                                                            5.9%;
29.4%;
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                                                                             30,5
                                                                                                                                                         5.9%;
24.2%;
  3
5
                                                 notein; 343 AA.
                                                                                                                                                                                                                                                                                                                                                                               ein; 297
protein
  . 9
                                                                              . 9
                                                                                                                                                                                                                                                                                                in; 321 A
protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 polypeptide
                                                                                                                                                                                                                                       SCI.
Score
Pred.
                                                                                                                                       343
                                                                                                                                                                                                                                                                                                                                                    CORP.
                                                                                                                                                                                                                                                                                                                               Score 70.5;
Pred. No. 42;
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Pred.
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in sequence
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#2948
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No. 39;
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No. 46;
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No.
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No.
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No
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                                                  NO:1122
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Query Match
Best Local Similarity
RESULT 1232
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RESULT 1229
                                                                                                                                                                                                                                                                                                          Best Local Similarity RESULT 1228
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                                                                                  Query Match
Best Local Similarity
SULT 1231
                                                                                                                                                                                          Query Match
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                                                                                                                                                                                                                                                                                                                           Query
                                                                                                        (FEDE/) FEDER J N.
(MINT/) MINTIER G.
(RAMA/) RAMANATHAN C
(HAWK/) HAWKEN D R.
                                                                                                                                           Ovine melatonin receptor O46608
US2004161823-Al.
                                                                                                                                                                                                                ADY15180 standard; protein; 35 PRO polypeptide SEQ ID NO 986.
                                                                                                                                                                                                                                                                                 ADY15182 standard; p
PRO polypeptide SEQ
WO2005016962-A2.
AAE38521 standard; protein; 365 AA. Human PTGER3 protein isoform, EP3b.
                                       (MERI ) MERCK FROSST CANADA INC.
                                                        Prostaglandin-EP3-9
WO9500552-A1.
                                                                         AAR69518 standard;
                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   luman NOV10a protein
JS2004162236-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NDR49221 standard; protein;
                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                  VERNET C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BENTO P.
BOLDOG F.
BURGESS C.
CASMAN S.
BOKOR J C.
EDINGER S R.
ELLEEMAN K.
FERNANDES E.
GERLACH V.
                                                                                                                                                                                                                                                                                                                                                         RIEGER D.
SHENOY S.
SHIMKETS R.
SMITHSON G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GERLACH V.
GROSSE W.
GUNTHER E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            GUSEV V.
                                                                                                                                                                                                                                                                   GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                          PEYMAN J A.
RASTELLI L.
                                                                                                                                                                                                                                                                                                                                                                                                                         MACDOUGALL J R.
MALYANKAR U M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ALSOBROOK J
                                                                                                                                                                                                                                                                                                                                                   STONE D.
                                                                                                                                                                                                                                                                                                                                                                                                           PATTURAJAN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEPLEY D.
                                                                                                                                                                                                                                                                                          protein; 350
Q ID NO 988.
                                                                                                                 a
                                                                         protein;
                                                                receptor.
                                                                                                                                                                                 5.9%;
18.5%;
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18.5%;
                        5.9%;
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23.1%;
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30.0%;
                                                                         365
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                        Score 70.5;
Pred. No. 59
                                                                                                                                                                                                                                                  Score
Pred.
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Pred.
                                                                                                                                                                                 Score 70.5;
Pred. No. 52;
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Pred. No. 51;
                                                                                                                                                         AA.
protein.
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55;
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52;
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Best Local Similarity RESULT 1238
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Best Local Similarity
RESULT 1237
                                                              Best Local Similarity RESULT 1240
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RESULT 1236
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RESULT 1235
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Query Match
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(SLAT/) SLATER S C
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B S
                             AAR48711 standard;
G-protein coupled;
WO9405695-A1
                                                                                                                                                                                                                                                                                                                                                                                                     US2003233675-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human prostaglandin US2003224393-A1. 04-DEC-2003.
                                                                                                                                                                                                   AAE38520 standard; protein; 374 AA.
Human PTGER3 protein isoform, EP3d.
WO2003064471-A2.
                                                                                                                                                                                                                                                                                      ADF04358 standard; protein;
Bacterial polypeptide #471.
US6605709-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human prostaglandin US6670134-B1.
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5.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003064471-A2
           17-MAR-1994.
(UYNY ) UNIV
                                                                                                                 Human prostaglandin US2003224393-A1.
                                                                                                                            ADI35075 standard; protein; 374 AA.
Human prostaglandin E receptor subtype
                                                                                                                                                          (DECO-) DECODE GENETICS EHF.
ry Match 5.9%;
t Local Similarity 24.2%;
                                                                                                                                                                                         07-AUG-2003
                                                                                                                                                                                                                                            (GENO-) GENOME THERAPEUTICS (STY Match 5.9%; Local Similarity 33.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-SEP-2004
(FARB ) BAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Prostaglandin E2 WO2004074830-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADR67864 standard; protein; Prostaglandin E2 EP3 III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ALLR ) ALLERGAN INC. (UYAR-) UNIV ARIZONA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADL15889 standard; protein; 365 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DECO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADI35077 standard;
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                                                                                                                                                                                                                                                                                                                                                                                               CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
           VIND
                                                                        DECODE GENETICS EHF.
h 5.9%;
Similarity 24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BAYER HEALTHCARE AG.
5.9%;
h
Similarity 24.2%;
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h 5.9%;
Similarity 24.2%;
 NEW YORK STATE.
5.9%;
                                                                                                                                                                                                                                                                                                                                                                           ი 4
                                         protein; 379 rat serotonin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               protein; 365 AA.
n E receptor subtype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24.2%;
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21.2%;
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24.2%;
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Pred.
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Pred.
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Pred.
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Pred.
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Pred.
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                                         AA.
2 receptor
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                                                                         70.5; I
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No. 55;
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56;
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55;
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  <u>ب</u>
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  Length 379;
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                                                                                                                             protein
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Best Local
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                                                                   RESULT 124
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Human PTGER3 protein isoform, EP3c.
WO2003064471-A2.
07-AUG-2003.
(DECO-) DECODE GENETICS EHF.
QUERY MAtch
5.9%; Score 70
Best Local Similarity 24.2%; Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAW02683 standard;
G-protein coupled
US5508384-A.
                        Human PTGER3 protein isoform, WO2003064471-A2.
                                                                                                                                                                                                            AAR69516 standard; protein; 390 AA. Prostaglandin-EP3-alpha receptor. W0950552-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human prostaglandin US2003224393-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAR69517 standard; protein; Prostaglandin-EP3-21 recepto WO9500552-A1.
                                                                                                                      AAE38516 standard; protein; 390 AA. Human PTGER3 protein isoform, EP3a1 WO2003064471-A2.
                                                                                                                                                                                                                                                                                                        Human prostaglandin WO2004075813-A2.
                                                                                                                                                                                                                                                                                                                 ADS13753 standard; protein; 388 AA.
Human prostaglandin E2 EP3 II polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                        Human prostaglandin
US6670134-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                    ADL15887 standard; protein;
Human prostaglandin EP3 rece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MERI) MERCK FROSST CANADA INC.
ry Match 5.9%; Sco
t Local Similarity 24.2%; Pre
                                                                                                                                                                                                     05-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                    (DECO-) DECODE GENETICS EHF.
ry Match 5.9%;
t Local Similarity 24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADI35061 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JAN-1995
                                                                                                                                                                                                                                                                                 (FARB ) BAYER HEALTHCARE AG.
                                                                                                                                                                                                                                                                                                                                                                        (ALLR ) ALLERGAN INC.
(UYAR-) UNIV ARIZONA.
                                                                                                                                                                  (MERI ) MERCK FROSST CANADA
TY Match
Local Similarity 24.2%;
                                                                                                                                                                                                                                                Local Similarity
1247
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Match
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                                                                           DECODE GENETICS EHF. h 5.9%; Similarity 24.2%;
DECODE GENETICS
h 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   peptide; 379 rat serotonin
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                                                                                                                                                                                                                                                           5.9%;
24.2%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor subtype
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EHF.
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                                           390 AA.
m, EP3a2.
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Pred. No. 60;
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Pred.
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Pred. No. 61;
Score 70.5;
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τ #2.
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58;
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Best Local Similarity
RESULT 1250
ID ADTIFCT
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RESULT 1258
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RESULT 1254
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RESULT 1257
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WZGO30664471-A2.
07-AUG-2003.
(DECO.)
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04-DEC-2003.

(DECO-) DECODE GENETICS EHF.

5-9%;

ery Match 5-9%;

24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADI35067 standard; protein; 390 AA.
Human prostaglandin E receptor subtype
US2003224393-A1.
04-DEC-2003.
04-DEC-2003.
0ECO-) DECODE GENETICS EHF.
CDECO-) DECODE 5.9%; Score 70.5
ETY Match
st Local Similarity 24.2%; Pred. No.
                                                                                                 Human PTGER3 protein isoform, EP3e. W02003064471-A2.
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                                                                                                                                                                                             AAW57411 standard; protein;
Human prostaglandin EP3-VI I
JP10113185-A.
                                                                                                                                                                                                                                                                                    ADS76168 standard; protein; Prostaglandin E2 EP3 I. WC2004075814-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADL15885 standard; protein; 390 AA. Human prostaglandin EP3 receptor #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYAR-) UNIV ARIZONA.
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Human prostaglandin EP3 receptor
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(ONOY) 5.9%;
Exy Match 5.9%;
E Local Similarity 24.2%;
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ry Match 5.9%;
t Local Similarity 24.2%;
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WO2004074842-A2.
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Human prostaglandin E2 EP3 |
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US6670134-B1.
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24.2%;
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                                 isoform,
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protein.
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m, EP3-VI.
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                                                                 Score 70.
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Pred. No. 61;
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Best Local Similarity
RESULT 1260
ID ADTIFAT
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RESULT 1262
ID ABP8190
DE Human p
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Best Local 9
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Query
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04-DEC-2003.
(DECO-) DECODE GENETICS EHF.
5-9%;
ery Match 5-9%;
24.2%;
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04-DEC-2003.
(DECO-) DECODE GENETICS EHF.
5-9%;
ary Match 5-9%;
24.2%;
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(DECO-) DECODE GENETICS EHF.

59%;

ery Match

59%;

24.2%;
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Human prostaglandin E receptor (
US2003224393-A1.
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                                                                                                                                                                         Protein #69 with WO2004032842-A2.
                                                                                                                                                                                  ADO55167 standard; protein; Protein #69 with increased;
                                                                                                                                                                                                                                                                                                                      AAE38522 standard; protein; 402 AA.
Human PTGER3 protein isoform, EP3-V
W02003064471-A2.
                                                                                                                                                                                                                                                                                                                                                                                                       ABP81904 standard; protein; 402
Human prostaglandin E2 receptor
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US2003224393-A1.
                                                                                                           ADO29620 standard;
Human GPCR PTGER3;
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(DECO-) DECODE GENETICS EHF.
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WO200261087-A2.
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                           EP1522594-A2
                                             ADZ09834 standard;
                                                                                                                                                        (VAND-) VAN ANDEL INST.
           (FARB )
                                                                              (PRIM-) PRIMAL INC.
                                                                                                  102004040000-A2.
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BAYER HEALTHCARE AG.
5.9%;
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n E recept
                                                                                                          protein; 402 AA.
SEQ ID NO:722.
                                    protein; 402 AA.
r marker DKFZp586M0723
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1 E receptor subtype EP3
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Pred. No. 63;
Score
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: subtype
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subtype
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EP3
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No. 61;
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70.5;
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402;
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Best Local Similarity
RESULT 1268
ID AAE38514 standard; p
DE Human PTGER3 protein
PN W02003064471-A2.
Best Local :
RESULT 1276
ID ABP40525
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Best Local Similarity
RESULT 1275
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                                    (ZHOU/) ZHOU Y.
(KOVA/) KOVALIC D K.
(SCRE/) SCREEN S E.
(TABA/) TABASKA J E.
(CAOY/) CAO Y.
                                                                                                                                                                                                                                                                                                                                  Human PTGER3 protein isoform, W02003064471-A2.
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                                                                                                                                                                                                                                                            Human prostaglandin E receptor subtype US2003224393-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAE38518 standard; protein; 425 AA.
Human PTGER3 protein isoform, EP3f.
WO2003064471-A2.
07-AUG-2003.
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                                                                                                               ADY09805 standard;
Plant full length
                                                                                                                                                           (INMR) MERIEUX ORAVAX PASTEUR MERIEUX SERUMS (HUMA-) HUMAN GENOME SCI INC.
                                                                                                                                                                                                H. pylori GHPO
                                                                                                                                                                                                          AAW98431 standard;
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US2003224393-A1.
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5.9%;
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ry Match 5.9%;
t Local Similarity 24.2%;
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ry Match 5.9%;
t Local Similarity 24.2%;
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protein;
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5.9%;
24.2%;
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polypeptide
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cm, EP3h.
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68;
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84,
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RESULT 1278
                Query Match
Best Local Similarity
RESULT 1284
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                                                                                                                                                                                                                                                                                                           (ALLE/) ALLEN S M. (HITZ/) HITZ W D. (KINN/) KINNEY A J. (TING/) TINGEY S V.
                                                                                                                                                                                                                                                                                                                                                                                                                            wheat sugar transport protein; 539 AA.
US6383776-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABU30473 standard;
Protein encoded by
WO200277183-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADS06092 standard; protein; 499 AA. Staphylococcus epidermis polypeptide
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US6380370-B1.
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(DOUC/) DOUCETTE-STAMM L.
(BUSH/) BUSH D.
                                                                                                                                                                            Protein encoded by WO200277183-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2004147734-A1
                                                                                                  ADN22789 standard; protein;
Bacterial polypeptide #5442
US2003233675-A1.
                                                                                                                                                                                     ABU27418 standard; protein; 548 AA.
Protein encoded by Prokaryotic esso
                                                                                                                                                                                                                                                      US2002199217-A1.
                                                                                                                                                                                                                                                             ADG47930 standard; protein; 539 AA.
Wheat Beta-vulgaris-like sugar transport protein
                                                                                                                                                                                                                                                                                                                                                          US2002178468-A1.
                                                                                                                                                                                                                                                                                                                                                                   ABU08338 standard; protein;
Wheat sugar transport protei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENO-) GENOME THERAPEUTICS
ADD46023 standard; protein; 599 AA.
Rat Protein P23978, SEQ ID NO 11695
                                                             (CAOY/) CAO Y.
(HINK/) HINKLE G J.
(SLAT/) SLATER S C.
                                                                                                                                       (ELIT-) ELITRA PHARM INC.

CY Match 5.9%;

Local Similarity 24.0%;
                                                                                                                                                                                                                                   (HELE/) HELENTJARIS
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26.0%;
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21.1%;
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in #4.
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Pred. No.
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Best Local Similarity RESULT 1285
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                              Best Local
RESULT 1293
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RESULT 1288
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27-FEB-2003.
                                                          Arabidopsis thaliana protein; EP1033405-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAM78767 standard;
Human protein SEQ
WO200157190-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FARB ) BAYER AG
Arabidopsis thaliana proteir EP1033405-A2.
                                                                                                                                                                                                                                                                                  Human prostate cancer WO200055174-A1.
                                                                                                                                                                                                                                                                                                                                                ABB92892 standard; protein; 700 AA. Herbicidally active polypeptide SEQ WOZ00210210-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                             ADJ64315 standard; protein; 662 AA. Cartilage differentiation inhibiting W02004013326-A1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SYNA-) SYNAPTIC PHARM CORP.
xy Match 5.9%;
t Local Similarity 20.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus
US2003143729-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABW02687 standard;
                                                                                                                                   ARAGIYS55 standard; protein;
Arabidopsis thaliana proteir
                                                                                                                                                                                                    Arabidopsis thalianā-like sugar transport
US2002199217-A1.
                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME (ROSE/) ROSEN C A.
                                                                                                                             EP1033405-A2.
                                                                                                                                                                                                                      ADG47941 standard; protein; 740 AA
                                                                                                                                                                                                                                                                                                    AAB56721 standard; protein;
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                                                                                                                                                                                  (HELE/) HELENTJARIS T G.
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22.7%;
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GABA
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n fragment
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n fragment
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             927 AA.
n fragment
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transporter
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                                                                                                     DB 3;
.5e+02;
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.4e+02;
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.3e+02;
                                        DB 3;
.7e+02;
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.4e+02;
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                                                  815;
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U6-SEP-2000.

Query Match

Best Local Similarity

RESULT 1294

ID ABP7777
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RESULT 1296
ID ADPOST
Best I RESULT ID ABI DE Ann PO 10 PO 10
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RESULT :
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RESULT 1300
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RESULT 1297
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                                                                                             Human gravin.
EP1191107-A2.
                                                                                                                                                                  Human gravin protein; 17
US6090929-A.
18-.HH------
                                                                                                                                                                                                         21-APR-1998.
21-APR-1998.
(UYOR-) UNIV OREGON HEALTH SCI.
5.9%; Scirry Match 5.9%; Scirry Match 34.8%; Pr
                                                                                                                                                                                                                                                    Human gravin polypeptide. US5741890-A.
                                                                                                                                                                                                                                                                                                                                ADM29274 standard; protein;
Human novel protein NOV2b.
WO2003064628-A2.
                                                                                                                                                                                                                                                                                                                                                                                                           ADK18350 standard;
Human NOVX protein
WO2003057854-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW17057 standard; protein; 1027 Candida albicans chitin synthase W09716540-A1.
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(ELIT-) ELITRA PHARM INC.
(EY Match 5-9%;
27 Match 22.3%;
          Angiogenesis-associated WO200279492-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-MAY-1997.
(CHEM-) CHEMGENICS PHARM INC.
                                                                                                                                                                                                                                                                       AAW53863 standard; peptide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADH22510 standard; protein; 1147 AA.
Human transporter & ion channel (TRICH)
W02003093444-A2.
                                     ABU03477 standard; protein;
                                                                         27-MAR-2002.
(SCHD ) SCHERING
                                                                                                                  AAO17365 standard;
                                                                                                                                                                                                                                                                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                     L8-JUL-2000.
(UYOR-) UNIV OREGON
                                                                                                                                                                                                                                                                                                              (CURA-) CURAGEN CORP.
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                                               Drosophila melanogaster protein, 256 W0200403999-A2.
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ry Match 5.9%;
it Local Similarity 24.1%;
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Novel human diagnostic protein #21009
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Arabidopsis thaliana
EP1033405-A2.
                                                                                                                                             Human mutant G protein-coupled receptor WO200022129-A1.
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06-SEP-2000.
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(1-MAY-1995.

(ALCO-) ALCOHOLISM & DRUG ADDICTION RES

TY Match 5.9%; Score 70;

TY Match 23.6%; Pred. No. 5
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Human G-protein receptor WO200127632-A2.
                                                                             AAU01297 standard; protein;
Human G-protein receptor 8,
WO200127632-A2.
                                                                                                                                                                                                                                                                                                              AAR72985 standard; protein; 333 AA
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                 AAU01295 standard;
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                                                  (CAMB-) CAMBRIDGE DRUG DISCOVERY (WILL/) WILLIAMS K M.
                                                                     19-APR-2001
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Human G-protein receptor 8,
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GPR7 ligand related
WC2002102847-A1.
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Human GPR8-ligand related protein
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                                                                     Human GPR8 protein WO2003045994-A1.
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ry Match 5.9%;
t Local Similarity 23.6%;
                                                                                                                                                                                                                                                                                                                                                                                             WO200244368-A1.
ADC22691 standard; protein; 333 AA.
Human G protein-coupled receptor (GPCR) polypeptide #44.
                                                                                                                                         08-AUG-2002
                                                                                                                                                          ABP81897 standard; protein; 333 AA.
                                                                                                                                                                                                                                                                                                                                  ABU61448 standard; protein;
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                                                                                         ABR57245 standard;
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SEQ ID NO:84.
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(LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T
                                                                                                                                                      (LIAW/) LIAW C W.
(BEHA/) BEHAN D P.
(CHAL/) CHALMERS D T
                                                                                               Human wild-type hGPR8 amino WO2003097795-A2.
                          Human GPCR GPR8, SEQ ID NO:802. W02004040000-A2.
                                                                                                                                                                                                                                                                                                                                                  Human GPR8 polypeptide. JP2003009867-A.
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02-OCT-2003.
(FARB ) BAYER AG
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Human GPR8, SEQ ID
WO2003057236-A1.
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Human G protein-coupled receptor (GPCR)
US6555339-B1.
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                                                                                     27-NOV-2003.
(NORA-) NORAK BIOSCI
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ry Match
5.9%;
t Local Similarity 23.6%;
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RESULT 1339
ID ADO3104
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Best Local Similarity
RESULT 1347
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                                                                         (OAKL/) OAKLEY R H.
(BARA/) BARAK L S.
(LAPO/) LAPORTE S A.
(CARO/) CARON M G.
                                                                                                                                                                                                                                                                                                                                                  Human HA tagged wild-type hGPR8 w02003097795-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                      ADV24041 standard; protein; 333 AA. Neuropeptide W antibody associated WO2004106382-A1.
                                                                                                                                                                                                      Human hGPR8-enhanced recept
WO200309770e `^
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sry Match 5.9%;
st Local Similarity 23.6%;
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21-MAY-2004.
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                 Enhanced human G
WO2005012876-A2.
                                    ADX44597 standard;
                                                                                                                          Human GPR8-enhanced US2004091946-A1.
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5.9%;
t Local Similarity 23.6%;
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(NORA-) NOR
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NORAK BIOSCIENCES INC
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                         ard; protein; 364
G-protein coupled
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protein SeqID
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DE Human p
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Best Local Similarity
RESULT 1356
ID ABM67264 standard;
DE Photorhabdus lumine
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31-MAR 2005.
(NORA-) NORAK BIOSCIENCES INC.
5.9%; 
xy Match
5.9%; 
23.6%; 
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                                                                                                                                                                                                                                                                                                      ADA54410 standard;
Human protein, SEQ
EP1293569-A2.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADN49121 standard; protein; 388 Mouse oxytocin receptor protein. US2004086881-A1.
                                                                      ADA34110 standard; protein; 470 Acinetobacter baumannii protein
                                                                                                                                                           ADC96947 standard;
                                                                                                                                                                                                                  Human novel polypeptide
WO200274961-A1
                                                                                                                                                                                                                            ABG99947 standard; protein;
Human novel polypeptide #60.
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WO2005029035-A2.
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Photorhabdus luminescens protein sequence #361
                                                                                                   (GENO-) GENOME THERAPEUTICS S.9%; t Local Similarity 25.9%;
                                                                                                                                 24-JUN-2003
                                                                                                                                          US6583275-B1.
                                                                                                                                                                                                                                                                          (HELI-) HELIX RES
(REAS-) RES ASSOC
                                                                                                                                                                                                                                                                                                                                                                                                                                       (GOPA/) GOPAL S.
(MINT/) MINTIER G
(FEDE/) FEDER J.
                           (GENO-) GENOME THERAPEUTICS ry Match 5.9%; t Local Similarity 23.5%;
                                                                 US6562958-B1.
                                                                                                                                                                                                                                                                                                                                                               PRIM-) PRIMAL INC
                                                                                                                                                                                                 HYSE-) HYSEQ INC.
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BIOTECHNOLOGY.
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         protein; 474 AA.
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67;
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Best Local Similarity RESULT 1357
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RESULT 1364
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RESULT 1362
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28-NOV-2002.
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Protein encoded by
WO200277183-A2.
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Human TRICH-20 protein.
WO200212340-A2.
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(CNRS ) CNRS CENT NAT RECH
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Staphylococcus aureus antigenic protein
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                                                            AEB39900 standard; protein; 637
L. pneumophila protein SEQ ID NC
WO2005049642-A2.
                                                                                                                                                                                                                                                 ABU18262 standard;
Protein encoded by
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WO200153312-A1.
                                                                                                    (ELIT-) ELITRA PHARM INC.
5.9%;
ry Match
t Local Similarity 23.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABM72414 standard; protein;
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                                                                                                                                                                                                                  (ELIT-) ELITRA PHARM INC.
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h 5.
         INST PASTEUR.
INSTEM INST NAT SANTE & RECHUNIV LYON 1 BERNARD CLAUDE.
CNRS CENT NAT RECH SCI.
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Prokaryotic essential
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Prokaryotic essential
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channel-24
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(SLAT/) SLATER S C.
(CHEN/) CHEN X.
(GOLD/) GOLDMAN B S.
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                                                                             ADU69581 standard; proteis sagalactiae hyperimmune W02004099242-A2.
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HCV fusion protein
JP06092996-A.
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sry Match 5.9%; Score 70;
t Local Similarity 21.4%; Pred. No.
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L. pneumophila protein SEQ
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Human diagnostic and therapeutic pp
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(INCY-) INCYTE CORP.
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1.4e+02;
                      DB 8;
2.7e+02;
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2.5e+02;
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                                                                                                                                                                                         DB 8;
2.7e+02;
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1.8e+02;
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l.5e+02;
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                                       Length 1049;
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Best Local Similarity RESULT 1379
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                                                                  Best Local Similarity RESULT 1381
                                                                                                                                                                                                                                                     Best Local Similarity RESULT 1380
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                                                                                                                                                                                                                                                                                                                                                                                                                            WOJCO-2002.
21-NOV-2002.
(INSP ) INST PASTEUR.
(CINSP ) CNRS CENT NAT RECH SCI.
(CINRS ) CNRS CENT NAT S.9%; Score 70

Match 12-rity 18.8%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Streptococcus agalactiae protein FR2824074-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADU69756 standard; protein; 1049 AA. S agalactiae hyperimmine corin
                                                                                                                                                                                                                                                                                                                                            ADP07803 standard; protein; Human secreted protein, seq WO2004042000-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Streptococcus agalactiae protein, SEQ ID 3748 W0200292818-A2.
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(INSP ) INST PASTEUR.
(CNRS ) CNRS CENT NAT RECH SCI.
(CNRS ) CNRS CENT NAT RECH SCI.
(SNRS ) SCORE
(SNRS ) STEEL STEEL
                                                                                         (GENO-) GENOME THERAPEUTICS CORP.

1.12 Match 5.8%; Score
1.14 Local Similarity 23.3%; Pred.
                                                                                                                                                         ADA33664 standard; protein; 198
Acinetobacter baumannii protein
US6582958 B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADV81299 standard; protein; 1049 AA. Streptococcus agalactiae protein, SI W0200292818-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADV82666 standard; protein; 1049 AA. Streptococcus agalactiae protein, SEQ WO200292818-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADV79100 standard; protein; 1049 AA.
Streptococcus agalactiae protein, SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (CNRS ) CNRS
Alloiococcus otitis WO2003048304-A2.
                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME
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WO2004099242-A2.
                                               ADB09276 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (INSP ) INST PASTEUR. (CNRS ) CNRS CENT NAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AG.
                                            protein; 201 AA
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5.9%;
18.8%;
                       antigenic protein SEQ ID NO:3216.
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5.8%;
22.0%;
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18.8%;
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Score
Pred.
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id 286.
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Pred.
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#825.
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No. 19
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2.7e+02;
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2.7e+02;
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2.7e+02;
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2.7e+02;
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2.7e+02;
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2.7e+02;
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Query Match
Best Local S
RESULT 1382
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ID AI
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PD 1:
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RESULT 1389
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RESULT 1385
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RESULT 1383
                                           Query Match
Best Local Similarity
RESULT 1390
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(INSP) INST PASTEUR.
(INSP) INSEM INST NAT SANTE & RECH MEDICALE.
(INRM) INSEM INST NAT SANTE & RECH MEDICALE.
(UYLY-) UNIV LYON 1 BERNARD CLAUDE.
(CYRS) CURS CENT NAT RECH SCI.
(CYRS) CURS CENT NAT RECH SCI.
5.8%; Score 69.5; DB
Jery Match
17.6%; Pred. No. 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAU01288 standard; protein; 218 AA. Brassica napus fatty acid desaturase, WO200125453-A2.
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L. pneumophila protein SEQ ID NO 5978.
WO2005049642-A2.
                                                                                                                                                                                                                                                                                                                     Drosophila melanogaster polypeptide WO200171042-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABG66935 standard; protein; 253 A Novel G-protein coupled receptor WO200240539-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-APR-2001.
12-APR-2001.
(MIAC ) CANADA MIN AGRIC & AGRI-FOOD CANADA.
12-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel G protein US2002058306-A1.
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Novel G protein coupled receptor (n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (PHAA ) PHARMACIA & UPJOHN CO.
ry Match 5.8%; Score
t Local Similarity 20.9%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU29449 standard; protein; 210 AA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alloiococcus otitis WO2003048304-A2.
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ADE86076 standard; protein; 296 AA.
Streptomyces hygroscopicus ABC transporter.
  Streptomyces
                                                                                                                                                          US6551795-B1.
                                                                                                                                                                           Pseudomonas aeruginosa
                                                                                                                                                                                                  ABO80446 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB09278 standard; protein;
                                                                                                                                                                                                                                                                                          (PEKE ) PE CORP NY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (VOGE/) VOGELI G.
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                                                                   GENOME THERAPEUTICS 5.8%; Similarity 22.1%;
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                                                                                                                                                                                                  protein;
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26.0%;
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26.0%;
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24.2%;
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27.7%;
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20.9%;
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                                                                                                                                                                           tein; 270 AA.
polypeptide
                                                                   Score
Pred.
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No. 46
                                                                   No.
                                                                                                                                                                                                                                                                                                                                                                                                                             No.
                                                                                                                                                                               #12621
                                                                                                                                                                                                                                                                                                                                                          SEQ
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34;
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42;
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44;
                                                                     .5;
.48;
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5
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                                                                                                                                                                                                                                                  46;
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Best Local Similarity RESULT 1392
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                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                          Best Local Similarity
                                                                                                                                                                                      Best Local Similarity RESULT 1397
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                                              US2003195335-A1.
16-OCT-2003.
                                                                                             02-JAN-2003.
(NAAD-) NAT INST ADVANCED IND SCI & TECHNOLOGY.
(ADSC-) CENT ADVANCED SCI & TECHNOLOGY INCUBATIO.
5.8%; Score 69.5; DB 7;
sry Match
5.0%; Pred. No. 57;
                                                                                                                                                                                                                                                                                                                   Human olfactory and pheromone G protein coupled W0200224726-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABB44525 standard; protein;
Human GPCR3 polypeptide SEQ
WO200174904-A2.
11-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003082909-A1
                                                                                                                                                                                                                                       AAU85362 standard; I
G-coupled olfactory
WO200198526-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                  ABP95703 standard; protein;
Human GPCR polypeptide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human olfactory WO200168805-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200127158-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAG71524 standard; protein; 308 AA.
Human olfactory receptor polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AMHP
                                                                                                                                                                                                                                                                                                                                                                                                          WO200216548-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAU24742 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (YEDA ) YEDA RES &
                                                                       ABW02126 standard; protein;
Human GPCR3 protein.
                                                                                                                                                         EP1270724-A2.
                                                                                                                                                                                                                   (SENO-) SENOMYX INC
                                                                                                                                                                                                                                                                                                                                                                (NISC-) JAPAN SCI & TECHNOLOGY CORP.
ry Match 5.8%; Score 6
t Local Similarity 20.9%; Pred. N
                                                                                                                                                                                                                                                                                                                                                                                               28-FEB-2002
                                                                                                                                                                            ADC86333 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SENO-) SENOMYX INC.
                                                                                                                                                                                                                                                                                                     (CHEM-) CHEMCOM SA.
                                (SZEK/)
                                           (GROS/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
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GROSSE W M.
SZEKERES E S
CASMAN S.
ALSOBROOK J |
BURGESS C E.
                                                                                                                                                                 protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NTS. EV CO LTD.
5.8%; Score 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rd; protein; 308 AA. receptor AOLFR242.
                                တ
                                                                                                                                                                  protein; 308 AA. SEQ ID NO:786.
                                                                                                                                                                                                                                                            protein;
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20.9%;
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21.0%;
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20.9%;
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20.9%;
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or #223.
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O 216.
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No. 57;
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No. 54;
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20-MA.
(UYCO)
Query Match
Best Local of
RESULT 1404
ID ADE37'
DE Yea'
PN U'
                                                                                 Query Match
Best Local Similarity
RESULT 1405
ID AAU53139 standard; p
DE Propionibacterium ac
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Best Local S:
RESULT 1403
ID ADC33485
DE Yeast ARV
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Best Local
RESULT 1402
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Best Local Similarity
RESULT 1400
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Best Local Similarity
RESULT 1401
ID ADU20398 standard;
                            RESULT
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Best Local Similarity
RESULT 1399
                                    Query Match
Best Local S
                                                                                                                                                                   Yeast Ax. - US6566512-B1. US6566512-B1. 20.MAY-2003. (UYCO ) UNIV COLUMBIA NEW YORK. 5.8%; Score 69.5; D '*arch ''arity 18.8%; Pred. No. 61; ''ara. ''arity 18.8%; Pred. No. 61;
                                                                                                                                         ADE37749 standard; I
Yeast ARV1 (ARE-2 Re
US2003186879-A1.
02-OCT-2003.
                                                                                                                                                                                                                                                                                                Chlamydia pneumoniae involved in WO9927105-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   A. thaliana At5967210 homologue WO2004092349-A2.
ABM49658 standard;
Propionibacterium;
WO2003033515-A1.
                                                                                                                                                                                                                                       ADC33485 standard;
Yeast ARV1.
                                                                                                                                                                                                                                                                                                                                                                                 A. thaliana drought tolerance-associated WO2004092349-A2.
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(DECO-) DECODE GENETICS EHF.
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(GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                     ADU20398 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human G protein
WO2003000735-A2.
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Human G protein coupled receptor
                                                                                                             (UYCO ) UNIV COLUMBIA NEW YORK.
ry Match
Local Similarity 18.8%; Pr
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(BADI ) BASF PLANT
                                                       (CORI-) CORIXA CORP
                                                                          VO200181581-A2.
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                                    Local Similarity
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KEKUDA R.
GANGOLLI E A.
STONE D J.
SMITHSON G.
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TAYLOR S.
TCHERNEV V T.
SPYTEK K A.
                                                                                                                                                                                                                                                                                                                                                              BASF PLANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MACDOUGALL J
        ; protein; acnes pred
                                                                                  protein; 327 AA. acnes immunogenic
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5.8%;
33.7%;
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5.8%;
33.7%;
                                                                                                                                                           protein; 321 AA.
Required for viability)
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20.9%;
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20.9%;
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25.5%;
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21.4%;
       ein; 327 AA. predicted C
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                327
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Pred.
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Pred.
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Pred. No.
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61;
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61;
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60;
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59;
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57;
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                                 62;
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        polypeptide #14334.
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Best Local Similarity
RESULT 1409
ID AAU00302 standard; p
DE LPA receptor-related
PN w0200112838-A2.
PD 22-FEB-2001
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                              Best Local Similarity RESULT 1415
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                                                                                                                Best Local Similarity RESULT 1414
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22-APR-1999.
(LXRB-) LXR BIOTECHNOLOGY INC.
(LXRB-) LXR BIOTECHNOLOGY INC.
5.8%; Score
ery Match
20.2%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LPA receptor-related amino acid WO200112838-A2.
22-FEB-2001.
                                                                                ABB60948 standard; protein; 415 AA. Drosophila melanogaster polypeptide W0200171042-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                 Human lysophosphatidic acid US6485922-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADH10684 standard;
Rat Sprague-Dawley
WO2003104484-A1.
ADL12059 standard; protein; 41 Drosophila dmTrplalt2 protein. WO2003002137-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-Ebb-2004: (ATAIRGIN TECHNOLOGIES INC. (ATAI-) ATAIRGIN TECHNOLOGIES INC. 5.8%; Score 5.8%; Pred. 20.2%; Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY05489 standard;
Human EDG-2 protein
WO9919513-A2.
                                                                                                                           (DEVE-) DEVELOGEN ENTWICKLUNGSBIOLOGISCHE ry Match 5.8%; Score 69.5; t Local Similarity 20.9%; Pred. No. 83;
                                                                                                                                                           WO2003002137-A2.
                                                                                                                                                                             ADL12060 standard; protein; Drosophila dmTrp1 protein.
                                                                                                                                                                                                                                            WO200277183-A2.
                                                                                                                                                                                                                                                               ABU32698 standard;
Protein encoded by
                                                                                                                                                                                                                                                                                                                                         Listeria monocytogenes WO200177335-A2.
                                                                                                                                                                                                                                                                                                                                                          ABB47613 standard;
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                                                               (PEKE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (META-) METABOLEX INC.
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                                                                                                                                                                                                                                  (ELIT-) ELITRA PHARM INC
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                                                              PE CORP NY
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putative
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Prokaryotic esse
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mes protein
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22.0%;
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25.5%;
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polypeptide.
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No. 77;
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No. 70;
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9
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No. 62;
                                          No.
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82;
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77;
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87;
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DB 7;
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Best Local Similarity RESULT 1421
RESULT
ID AL
DE Ba
PN US
PD 18
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05-OCT-2004.

(GENO-) GENOME THERAPEUTICS

5.8%;

Ery Match

5.8%;

24.4%;
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                                                                                                                                                         Streptococcus pneumoniae ORF
US2005136404-Al.
23-JUN-2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABB66992 standard; protein; 428 AA. Drosophila melanogaster polypeptide W0200171042-A2.
                   Bacterial polypeptide #5002. US2003233675-A1.
                                                                                                                                                                                                                                                                                                         Streptococcus pneumoniae US6699703-B1.
                                                                                                                                                                                                                                                                                                                                                             06-SEP-2000.
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'Y Match 5.8%;

'T Local Similarity 23.6%;
                                                                                    Arabidopsis thaliana
EP1033405-A2.
                                                                                                      AAG30874 standard;
                                                                                                                                                                                                                                     US6800744-B1.
                                                                                                                                                                                                                                              Novel S. pneumoniae
                                                                                                                                                                                                                                              ADR95087 standard; protein; 461 AA.
Novel S. pneumoniae protein sequence,
                                                                                                                                                                                                                                                                                                                            ADK47327 standard;
                                                                                                                                                                                                                                                                                                                                                                     Arabidopsis thaliana EP1033405-A2.
                                                                                                                                                                                                                                                                                                                                                                                       AAG30875 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   cI-NT-his fusion protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAY41284 standard; protein;
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                                                                                                                                      (DOUC/) DOUCE
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HINK/) HINKLE G
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n fragment
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Famino
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coded by plasmid
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No. 1e+02;
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No. 98;
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91;
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98;
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Query Match
Best Local Similarity
RESULT 1425
ID ADS28512 standard; p
DE Bacterial polypeptid
PN US2001233675-A1.
PD 18-DEC-2003.
PA (FINK) HINKLE G J.
PA (SLAT/) SLATER S C.
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RESULT 1431
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RESULT 1429
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(CHEN/) CHEN X.
(GOLD/) GOLDMAN I
                                                                                                                                                                                                                                                C. pneumoniae CPN100557 processed a W0200024765-A2.
                                                                                                                                                                                ADR13717 standard;
Amidase, SEQ ID 54.
WO2004069848-A2.
                                                                                                                                                                                                                                                                                                                                                                                                               AAY41278 standard;
                                  Protein encoded WO200277183-A2.
                                                                                                         AAY92828 standard; protein; C. pneumoniae CPN100557 antiWO200024765-A2.
                                                                                                                                                                                                                                                                                                                                                                                              Fusion protein WO9953033-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Klebsiella pneumoniae
US6610836-B1.
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                                           ABU26764 standard;
Protein encoded by
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EP1033405-A2.
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                                                                                        (CONN-) CONNAUGHT LAB
                                                                                                                                                               19-AUG-2004.
(DIVE-) DIVERSA CORP.
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                                                                                                                                            ocal Similarity
                 ELITRA PHARM INC
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                                            protein; 547
Prokaryotic (
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5.8%;
21.4%;
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21.2%;
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5.8%;
21.4%;
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23.7%;
5.8%;
21.4%;
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.1e+02;
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.1e+02;
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.1e+02;
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.1e+02;
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.3e+02;
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DB 6;
.3e+02;
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Query Match
Best Local S
RESULT 1439
ID ABO07242
DE Human p53
PN W02002991
PD 12-DEC-20
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Best Local S
RESULT 1437
Best
RESULT
ID AL
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RESULT 1435
ID AAY83929 standard;
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Best Local Similarity
RESULT 1434
ID AAY01650 standard;
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SULT 1438
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                                                                                                   Novel protein; 5
W02003054152-A2.
03-JUL-2003
(HYSE-) HYSEQ INC.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A protein with cation transporting WO991372-Al.
18-MAD-19-1
                                                 Novel protein; Novel protein-related contig W02003054152-A2.
                                                                                                                                                                                                                                                                                                   ABB82980 standard; protein;
Human SLC22A related proteir
                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human diagnostic protein # W0200175067-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human carnitine WO200014210-A1.
                                                                                                                                                                                                              ABO07242 standard; protein;
Human p53 modifying protein,
WO200299122-A1.
                                                                                                                                                                                                                                                                                                                                                                              ABB82979 standard; p:
Human SLC22A related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-MAR-2000.
16-MAR-2000.
(CHUG-) CHUGAI RES INST MOLECULAR MEDICINE INC.
5.8%; Score 69.5; DB 3;
ry Match
10-cal Similarity 26.3%; Pred. No. 1.3e+02;
 ADP23817 standard;
                                    03-JUL-2003.
(HYSE-) HYSEQ INC.
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(HYSE-) HYSEQ INC.
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          Local Similarity 1442
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5.8%; Score 69.5; DB 2;
26.3%; Pred. No. 1.3e+02;
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Prokaryotic
 protein;
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26.3%;
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23.6%;
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protein-GenBank
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26.3%;
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.3e+02;
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Best
RESULT
ID AA
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Best Local Similarity
RESULT 1445
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Best Local Similarity
RESULT 1450
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RESULT 1448
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26-AUG-2003.
(GENO-) GENOME THERAPEUTICS |
5.8%;
ery Match | 5.8%;
23.6%;
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Amino acid sequence
WO2005026724-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acinetobacter baumannii protein US6562958-B1. 13-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRO polypeptide WO2004041170-A2.
                                                          ABP65234 standard;
Hypoxia-regulated
WO200246465-A2.
                                                                                                                               WO200277183-A2.
                                                                                                                                                  ABU32703 standard;
Protein encoded by
                                                                                                                                                                                                                     Listeria monocytogenes WO200177335-A2.
                                                                                                                                                                                                                                                                               (REAS-) RES ASSOC
                                                                                                                                                                                                                                                                                                   EP1308459-A2.
07-MAY-2003.
                                                                                                                                                                                                                                                                                                                    ADB65515 standard; protein; 573 AA.
Human protein encoded by clone TESTI20271790
                                                                                                                                                                                                                                                                                                                                                                                          Human polypeptide WO200190304-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABO62908 standard; protein; Klebsiella pneumoniae polype
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GENO-) GENOME THERAPEUTICS 
ry Match 5.8%; 
t Local Similarity 20.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA34637 standard;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAY-2004
                                                                                                                                                                                                                                        ABB47410 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                       (HUMA-) HUMAN GENOME
                                                                                                                                                                                                                                                                                                                                                                                29-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                              ABB89665 standard;
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                                                 13-JUN-2002
                                                                                                                     (ELIT-) ELITRA PHARM
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                  Local Similarity
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                  OXFORD BIOMEDICA UK
h 5.8%;
Similarity 19.6%;
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                                                                   ; protein; 599
protein #108.
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BIOTECHNOLOGY.
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                                                                                                                                                  protein; 579
Prokaryotic
protein;
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22.4%;
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polypeptide
                                                                                                                                                                                                                           ocein; 579 AA.
3 protein #114.
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.4e+02;
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.4e+02;
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.3e+02;
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.3e+02;
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                     DB 5;
.4e+02;
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Best Local Similarity
RESULT 1458
ID ADJ64317 standard; p
DE Cartilage differenti
PN W02004013326-A1.
PD 12-FEB-2004.
PA (ASAH ) ASAHI KASEI
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ID ABP4019
DE Staphyl
PN US63803
PD 30-APR-
PA (GENO-)
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ID AA
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RESULT 1459
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30-APR-2002.
(GENO-) GENOME THERAPEUTICS (5.8%;
21Y Match 5.8%;
27.2%;
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US6380370-B1.
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Human Protein P30531,
WO2003016475-A2.
                                                                                                                    ADJ64317 standard; protein; 663 AA. Cartilage differentiation inhibiting
                                                                                                                                                                                                                                                                                                                                                 Staphylococcus epidermis polypeptide US2004147734-A1.
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                                           ADQ96536 standard;
T cell activation
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                                                                                                                                                                                               Human vesicle membrane
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(INCY-) INCYTE PHARM
                                                                                                                                                                                                                                                                     AAY17390 standard; protein; 663 AA.
Human vesicle membrane protein-like
                                                                                                                                                                                                                                                                                                                   (DOUC/) DOUCETTE-STAMM L. (BUSH/) BUSH D.
                                                                                                                                                                                                                                                                                                                                                                     ADS07250 standard;
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(UYVA-) UNIV VANDERBILT.
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(FARB) BAYER AG.
                                   WO2004058805-A2.
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                                                                                                                                                                                                        ADM83092 standard;
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                  (ASAH-)
                                                                                          (ASAH ) ASAHI KASEI
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1456
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protein (VMP)2.
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ORF a
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D NO
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d protein
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69.5;
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b. 1.7e+02;
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.4e+02;
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DB 8;
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.7e+02;
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.6e+02;
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Query Match
Best Local Similarity
RESULT 1464
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RESULT 1462
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RESULT 1468
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RESULT 1466
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RESULT 1465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABU41908 standard; protein encoded by Protein encoded by W0200277183-A2.
                                                                                                                                                                                                                                                                                                                                               (LAUR/) LAURIE C C.
(RAVA/) RAVANELLO M.
(SAVA/) SAVAGE T.
(LEDE/) LEDEAUX J R.
(ROGE/) ROGERS J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADY14394 standard; protein; 663 PRO polypeptide SEQ ID NO 200. WO2005016962-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADY19824 standard; protein; 663 PRO polypeptide SEQ ID NO 5630. WO2005016962-A2.
                                                                                                     ABB98140 standard;
Human PMMM Incyte 1
WO200246383-A2.
                                                                                                                                                                                            Human Polycystin-L
WO200012046-A2
                                                                                                                                                                                                                                                                       Protein encoded WO200277183-A2. 03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                       US2004025202-A1.
05-FEB-2004.
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Maize oil-associated gene p:
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                                                             (INCY-) INCYTE GENOMICS INC.
xy Match 5.8%;
t Local Similarity 19.3%;
                                                                                                                                                                                  09-MAR-2000
                                                                                                                                                                                                                                                                                           ABU43821 standard; protein; 801 AA. Protein encoded by Prokaryotic essential
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                              Saccharomyces
                                         AAY96168 standard;
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                   WO200052162-A2.
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UYTE-) UNIV TENNESSEE RES CORP
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5.8%;
Similarity 19.9%;
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h
5.8%;
Similarity 24.5%;
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                              dard; protein; {
cerevisiae OPT
                                                                                                                   protein; 863 AA.
ID 7484157CD1.
                                                                                                                                                                                                      protein; protein.
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Prokaryotic (
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5.8%;
24.3%;
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22.0%;
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No. 1.7e+02;
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). 2e+02;
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..7e+02;
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.4e+02;
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.8e+02;
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.7e+02;
                                                                                                                                                    DB 3;
.2e+02;
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.2e+02;
                                                                                                                                                                                                                                                                                              gene
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LETY N.
Best Loca.
RESULT 1475
ID AAW467
DE Ami
PN W'
PD P'
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Best Local S
RESULT 1469
ID ADS4411
DE Bacter
PN US200
PD 18-D
PA (CA
PA (F
                                           Query Match
Best Local Similarity
RESULT 1476
ID AAM***
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RESULT 1472
ID ABU16635 standard; p:
DE Protein encoded by P:
PN W0200277183.A2.
PD 03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
RESULT 1471
ID ADZ26338 standard; [
DE Mouse hypoxia-respor
                                                                                                                                                                                               Query Match
Best Local S
RESULT 1474
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WO200277183-A2.
03-OCT-2002.
(ELIT-) ELITRA PHARM I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CAOY/) CAO Y.
(HINK/) HINKLE G (SLAT/) SLATER S (
                                                                                               AAW46761 standard; |
Amino acid sequence
WO9748797-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            S cerevisiae apoptosis WO200102550-A2.
                                                                                                                                                                    hABC3 protein.
WO9702346-A2.
                                                                                                                                                                                        AAW25671 standard;
                                                                                                                                                                                                                                       Acinetobacter baumannii protein #1623
US6562958-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAG70761 standard; protein; 881 AA. S cerevisiae apoptosis associated p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bacterial polypeptide #22547. US2003233675-A1.
                                 AAW46771 standard; protein; 1704
Amino acid sequence of human ATP
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                                                                              (GENZ ) GENZYME
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                            VO9748797-A1.
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DONHARDT A.
BARNES D.
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Prokaryotic es
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.1e+02;
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.6e+02;
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.5e+02;
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Best Lock
RESULT 1477
ID ABP520°
DE Homo
PN EP'
PD 2°
PA
PA
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Best Local Similarity
RESULT 1484
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Human ATP-binding of
WO2004020583-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABP52094 standard;
Homo sapiens ABC t:
EP1217066-A1.
                        ABM62108 standard; protein; Propionibacterium acnes perr W02003033515-A1.
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Human beta-APP, ATI
WO2005023858-A1.
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Human heat mitochondrial pr
                 24-APR-2003
                                                                                                WO200181581-A2.
                                                                                                         Propionibacterium
                                                                                                                  AAU65589 standard;
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         CORIXA
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         CORP.
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ATP-binding
                                  acnes permease/transporter-related
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cassette subfamily
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| protein as
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immunogenic
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er ABCA3 p
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34;
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.2e+02;
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.2e+02;
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.2e+02;
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                                  polypeptide #26784.
 191;
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RESULT 1491
ID ADN4685
DE Thermoo
PN WO20040
PD 18-MAR-
PA (NISC-)
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ID AE
DE Hu
PN WC
PD 07
PA (F
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ID AA
DE S.
PN WC
PD 20
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RESULT 1490
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RESULT 1494
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24-SEP-2003.
(REAS-) RES ASSOC BIOTECHNOLOGY.
IFY Match
5.8%; Sco
24.7%; Pre
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S. pneumoniae LPLC
WO9743303-A1.
                                                                                                                                                                                                                                                                                                ADM03849 standard; protein; 214 AA Human protein of the invention SEQ EP1347046-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABP58238 standard; protein; Human ovary-specific O1-236 WO200288314-A2.
                                                                                                                                                   ADT57286 standard; protein; 301 AA. Plant polypeptide, SEQ ID 7363. US2004216190-A1.
                                                                                                                                                                                                                          Thermococcus kode WO2004022736-A1.
                                                                                                                                                                                                                                                                                                                                                                                 ADJ63172 standard; p
Human nucleoplasmin
WO2003091400-A2.
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Human nucleic acid-binding protein,
                                                                            ADT98603 standard; protein;
Human mutant GPR10 protein.
US2004216177-A1.
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(INCY-) INCYTE PHARM
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      Photorhabdus lu
WO200294867-A2.
                       ABM69545 standard;
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                                                           OTSUKA PHARM
               ndard; protein;
luminescens pro
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kodakaraensis KOD1
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protein.
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                                                                                                                                                                                    & TECHNOLOGY CORP.

5 8%; Score 69;
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n (Npm2) protein.
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5.8%;
24.7%;
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24.7%;
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                               Human pituitary-derived G pr
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US-09-107-353-10
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US-09-107-383-10
US-09-107-383-6803
US-09-107-532A-6803
US-09-108-33-750C-24
US-09-108-33-750C-24
US-09-248-796A-14472
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US-09-252-991A-22861
US-09-3134-001C-3891
US-09-328-352-291A-22861
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(Sequence 2567, Application US/10104047

(Sequence 2567, Application US/10104047

(Patent No. 6943241

(GENERAL INFORMATION: NO. 6943241el full length cDN

(TITLE OF INVENTION: NO. 6943241el full length cDN

(FILE REFERENCE: H1-A0105

(CURRENT APPLICATION NUMBER: US/10/104,047

(CURRENT FILING DATE: 2002-03-25

(PRIOR APPLICATION NUMBER:

(PRIO
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; TYPE: PRT
; ORGANISM: Homo s
US-10-104-047-2567
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                                                                                          Sequence 6, Application US/08691814B
Patent No. 5981218
GENERAL INFORMATION:
APPLICANT: Rio, Marie-Christine
APPLICANT: Tomasetto, Catherine
APPLICANT: Basset, Paul
APPLICANT: Basset, Paul
APPLICANT: Basset, Paul
APPLICANT: Basset, Paul
APPLICANT: Brine, Jennifer
TITLE OF INVENTION: Isolated Nucleic Acid Molecules Useful
TITLE OF INVENTION: as Leukemia Markers and in Breast Cancer Prognosis
NUMBER OF SEQUENCES: 124
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Best Local
                                                                                   CORRESPONDENCE ADDRESS:
                                                  ADDRESSEE:
STREET: 11
                 CITY: Washington
STATE: DC
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                                                    E: Sterne, Kessler
1100 New York Ave,
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US-10-015-38A-227

US-10-015-67A-227

US-10-015-671A-227

US-10-015-671A-227

US-10-011-833A-227

US-10-011-833A-227

US-10-012-064A-227

US-10-012-064A-227

US-09-081-385-153

US-09-712-813-153

US-09-712-813-153

US-09-7700-354A-153
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Pred. No. 3.9e-69;
                                                       WW.
                                                       Goldstein & Fox P.L.L.C.
NW, Suite 600
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; TYPE: PRT
; ORGANISM: Human
US-09-949-016-8594
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US-09-949-016-8594
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                                                                                                                                                   CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR PELICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 8594, Application US/09949016 Patent No. 6812339
                                                                                NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 8594
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Best Local Similarity
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FILING DATE: 31-UUL-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/002,183
FILING DATE: 09-AUG-1995
ATTORNEY/AGENT INFORMATION:
NAME: Steffe, Eric K.
REGISTRATION UUMBER: 36,688
REFERENCE/DOCKET NUMBER: 1383.0090001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
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TELEFAX: 202-371-2543
INFORMATION FOR SEQ ID NO: 6
                                                                LENGTH: 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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LENGTH: 445 amino acids
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COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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; SEQ ID NO 92
; LENGTH: 341
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-08-846-762-92
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           GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: WUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
TITLE OF INVENTION: PNEUMONIAE FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 2709.2004001
CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR PILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO 9711
                                                                                                                                                                                                                                                      Sequence 9711, Application US/09489039A Patent No. 6610836
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Best Local :
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Lam, Joseph S.
APPLICANT: Burrows, Lori
APPLICANT: Charter, Deborah
APPLICANT: Charter, Deborah
APPLICANT: de Kievit, Teresa
TITLE OF INVENTION: No. 5994072el Proteins Involved in the Synthesis and .
TITLE OF INVENTION: of O-Antigen in Pseudomonas Aeruginosa
FILE REPERENCE: 6580-089
CURRENT APPLICATION NUMBER: US/08/846,762A
CURRENT FILING DATE: 1997-04-30
NUMBER OF SEQ ID NOS: 100
LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        345 R---SSLRCCRIRFTWALALLQCLNLVFLLADV
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                                                                                                                                                                                                                                                                                                                                                                                            326 PLLYIDYKL 334
                                                                                                                                                                                                                                                                                                                                                                                                                                  167 ETWFLDFKV 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      107 RFKVLILAYAVCRLRHWWAIALTTAVTSAFLLAKVILSKLESQGAFGYVLPIISFILAWI 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      233 GWIDTRFFFCWLILLGLFIVDATWTLVRRVLGGFK-----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38;
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31; Conserv
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24.0%; Pred. No. 0.
ative 20; Mismatche
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FILE REFERENCE: 5006.01
CURRENT APPLICATION NUMBER: US/10/226,629A
CURRENT FILING DATE: 2002-08-22
PRIOR APPLICATION NUMBER: US 60/314,182
PRIOR FILING DATE: 2001-08-22
NUMBER OF SEQ ID NOS: 736
SOFTWARE: Patentin version 3.1
SEQ ID NO 16
LENGTH: 891
TYPE: PRT
ORGANISM: Vaccinia virus
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; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-9711
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US-09-171-699-4
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Best Local S
Matches 38
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Patent No. 6448389
GENERAL INFORMATION:
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APPLICANT: Morham, Scott
APPLICANT: Zavitz, Kenton
APPLICANT: Hobden, Adrian
TITLE OF INVENTION: Therapeutic Compositions and Methods for Treating Viral Infection
                                                                                KARTI, CSABA
TITLE OF INVENTION: NO. 6448389e1
Uses Therefor
NUMBER OF SEQUENCES: 10
                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                          APPLICANT: The Wistar Institute of, Anatomy & Biology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141 SWLPSY 146
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                                                                                                                                                                                                                                                                                                                                                                              835 IDD---AQITTDDLVKSYSLIRPKILSMINYYNEMSRGYFEHM 874
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7 DMENALTGSQSSHASLRNIHSINPTQLMAR-IESYEGREKKGISDVRRTFCLFVTFDLLF
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STREET: Spring House Corporate Center, P.O. CITY: Spring House
                                           ADDRESSEE: Howson and Howson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                               Gonczol, Eva
Berencsi, Kl
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31.8%; Pred. No. 1.
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                                                                                                                            Cytomegalovirus DNA Constructs
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PCT-US94-02107-2
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                                                                                                                                                                                                                                Sequence 2, Application PC/TUS9402107
GENERAL INFORMATION:
APPLICANT: The Wistar Institute of, Anatomy and Biology
TITLE OF INVENTION: Recombinant Cytomegalovirus Vaccine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION FOR SEQ ID NO: 4: SEQUENCE CHARACTERISTICS:
    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                       TITLE OF INVENTION: RENUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 60/015,717

FILING DATE: 23-APR-1996

ATTORNEY/AGENT INFORMATION:

NAME: KODROFF, Cathy A.

REGISTRATION NUMBER: 33,980

REFERENCE/DOCKET NUMBER: WST66APCT

TELEPHONE: 215-540-9200

TELEPHONE: 215-540-9218
                                                                                                        ADDRESSEE: Howson and Howson
STREET: Spring House Corporat
CITY: Spring House
STATE: Pennsylvania
                                                                                       COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC_compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/171,699
FILING DATE: 19-Jan-199
CLASSIFICATION: <Unknown>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO:
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MEDIUM TYPE: Floppy disk
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                                                                       19477
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCSQAMAALQNLPQCSPDEIMAYAQKIFKILDEERDK------VLTHIDHIFMDI 190
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 19477
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                                                                                                                                                    Corporate Cntr,
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Indels 115;

Gaps

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US-09-976-594-503
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Matches
                                                                                                                                                                                                                                                                                                                 Sequence 503, Applica Patent No. 6673549 GENERAL INFORMATION:
                                                                SEQ ID NO 503
LENGTH: 723
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                      PRIOR APPLICATION NUMBER: 60/240,409
PRIOR FILING DATE: 2000-10-12
NUMBER OF SEQ ID NOS: 1143
SOFTWARE: PERL Program
                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/976,594
CURRENT FILING DATE: 2001-10-12
                                                                                                                                                                                                                                               APPLICANT: Furness, Michael
APPLICANT: Buchbinder, Jenny
TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS
FILE REFERENCE: PA-0041 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION FOR SEQ ID NO:
         NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No.
                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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LENGTH: 406 amino acid
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APPLICATION NUMBER: US 08/017,130
FILING DATE: 12-FEB-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Bak, Mary E. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: PCT/US94/02107
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           406 amino acids
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Pred. No. 1
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APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 56249
LENGTH: 221
                                                                                                                                                           Sequence 56249, Application US/09270767 Patent No. 6703491 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 41033
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Best Local Similarity
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APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 22
TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                             17 CIYIYSSMDQFLFIIILLILLTCLSFVEXYLFVNILXIDNYIGNXNVFLFFLLLFQXII
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18.0%;
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Pred. No. 1
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Pred. No. 4
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RESULT 12
US-09-724-653-2
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US-09-724-653-14
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; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-724-653-2
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GENERAL INFORMATION:
APPLICANT: Ling, Victor
TITLE CF INVENTION: NOVEL ABCB9 TRANSPORTER AND USES
FILE REFERENCE: APZ-004CP
CURRENT APPLICATION NUMBER: US/09/724,653
CURRENT FILING DATE: 2000-11-28
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Patent No. 6830913
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Best Local Similarity
                                                                                                          Sequence 14, Application US/09724653 Patent No. 6830913
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Best Local
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PRIOR FILING DATE: 1999-11-29
NUMBER OF SEQ ID NOS: 20
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CURRENT FILING DATE: 2000-11-28
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                                                                                                                                                                                                                                                                                        125 ISLGASFLLWWL--
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Pred. No. 1.1;
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-LSTVRPGTQ--ALEPGAATEAEGFPGSGR 163
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PRIOR APPLICATION NUMBER: 60/16
PRIOR FILING DATE: 199-11-29
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 14
LENGTH: 766
TYPE: PRT
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US-09-724-653-15
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TITLE OF INVENTION: NOVEL ABCB9 TRANSPORTER AND
FILE REFERENCE: APZ-004CP
CURRENT APPLICATION NUMBER: US/09/724,653
CURRENT FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: 60/167,930
PRIOR FILING DATE: 1999-11-29
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patentin Ver. 2.0
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Patent No. 683091
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PPPEQASGA 172
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18.0%; Pred. No. 6.1;
ative 39; Mismatches
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Pred. No. 6.1;
39; Mismatches
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                                                                      -LSTVRPGTQ--ALEPGAATEAEGFPGSGR 163
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Sequence 20444, Application US/09248796A

Sequence 20444, Application US/09248796A

Patent No. 6747137

GENERAL INFORMATION:
APPLICANT: Keith Weinstock et al
TITLE OF INVENTION: NUCLEIC ACID AND ACID SEQUENCES RELATING TO CANDIDA ALBICAN
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196, 132

CURRENT APPLICATION NUMBER: US/09/248,796A

CURRENT FILING DATE: 1998-02-12
PRIOR APPLICATION NUMBER: US 60/074,725
PRIOR FILING DATE: 1998-02-13
PRIOR FILING DATE: 1998-08-13
NUMBER OF SEQ ID NOS: 28208
SEQ ID NO 20444
LENGTH: 228
TYPE: PRT
CORGANISM: Candida albicans
US-09-248-796A-20444
Search completed: May 12, 2006, 20:48:56 Job time : 61 secs
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                                                                                                       203 LLATKONSYFTLPVIPLPGSEAKOE 227
                                                                                                                                                     162 ILAWIETWFLDFKVLP---QEAEEE 183
                                                                                                                                                                                                             151 KSTVLLSGFFLC-----LTALFSLLSASYFVGSVALTK--AAGAFGVIAVVAALYDTFA 202
                                                                                                                                                                                                                                                             107 REKVLILAYAVCRLRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISF----- 161
                                                                                                                                                                                                                                                                                                               91 LVETALTSYGAFWLSFAAINIPTFGILAAYQKDMTQLSSALAFYLIAWAILSFIFWLLTF 150
                                                                                                                                                                                                                                                                                                                                                             63 LIFVTL-----LWIIELNVN---GGIENTLEKEVMQYDYYSSYF------DIFLLAVF 106
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Result
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Maximum Match 100%
Listing first 1500
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1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US11B_PUBCOMB.pep:*
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Copyright (c) 1993 - 2006 Biocceleration Ltd.
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  250354 seqs, 46948837 residues
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1 US-11-102-240-14
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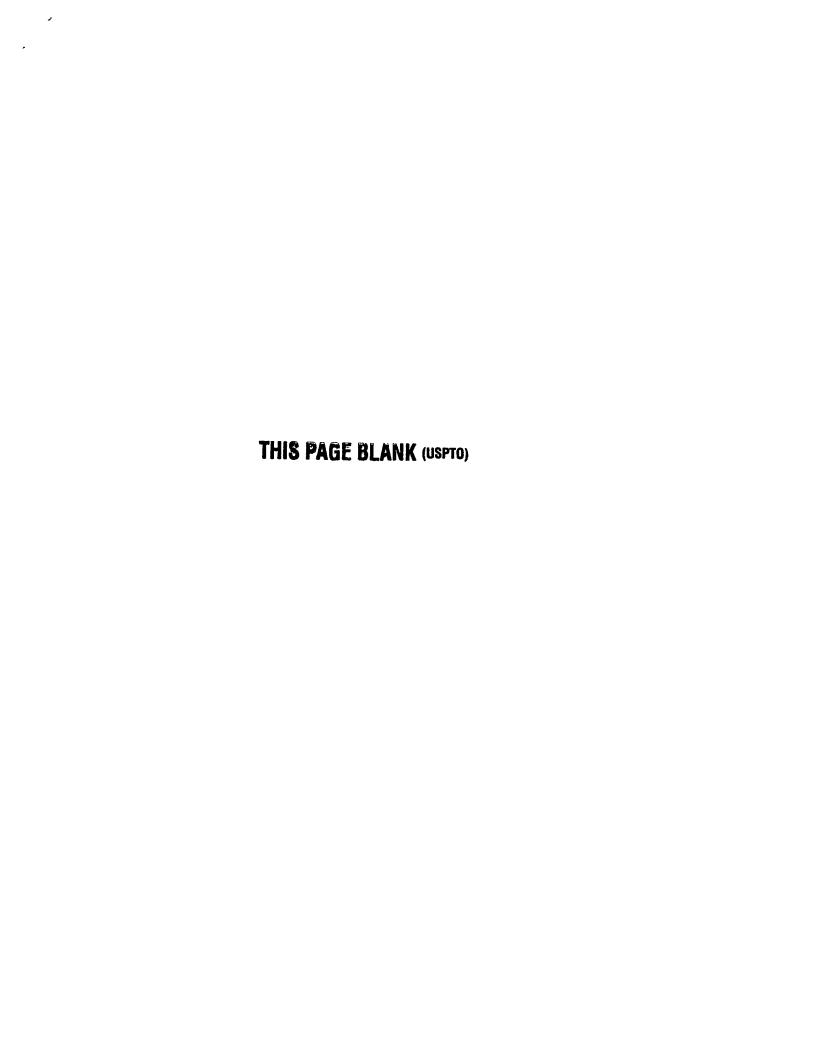
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C;Genetics	pothe	F72342		5.1		1489
A; Experime	NADH2 dehydrogenas	S42168				1488
A:Cross-re	hypothetical prote	T28980				1487
A; Molecule	hypothetical prote	T18998		-		1485
A;Status: ]	hypothetical prote	T19811				1484
A; Reference	nucleoplasmin A -	A26630				1482
A; Descript:	conserved hypothet	H69327	185 2	5 C	61.5	1481
submitted (	hymothetical prote	H70478				1480
C;Accession	hypothetical prote	G89947				1478
C;Date: 20	hypothetical prote	H97775				1477
C;Species:	epithelial membran	JC5045				1476
	tipoprotein signal	AF2618				1474
RESULT 2	hypothetical prote	S77185				1473
	probable NADH2 deh	S43955				1472
	hypothetical prote	C86655				1471
Db :	hypothetical prote	E69985				1470
	hypothetical prote	B99233			61.5	1469
Ov	hacitracin synthet	T31679			N 0	1467
Db	hypothetical prote	T20695			62	1466
	sodium channel pro	A60165			62	1465
 0	hypothetical prote	T18939			601	1464
t	process cross. / [r	C96767			v 0	1462
ק ק	hypothetical prote	T29010			5 6	1461
γ	prot	T43458			62	1460
	Rab6 GTPase activa	T13163			62	1459
Db	acriflavin resista	AE3557			62	1458
	conserved membrane	G97217			62	1457
O <sub>V</sub>	Ca2+-transporting	PWBYR1			6 0	1456
Matches	ocna procein - vib	S70958			5 0	1454
Best Loca	97K alpha trans-in	TNBEEH		•	5 S	1453
Query Mat	tegument protein 1	T42556			62	1452
2,000	aminopeptidase N [	E95092			6 0	1451
A:Genetics	interleukin-4 rece	A33380		•	n 62	1449
A; Note: sul	cytochrome-c oxida	A46616		•	62	1448
A; Cross-rel	protein H06H21.10	A88679			62	44
A; Residues	probable ABC trans	S73829			5, 6	1445
A;Status: F	nypotneticai prote	T25030		•	5 6	1444
A;Accession	heat shock protein	HHMS84		•	6 8	4.
A; Reference	nucleolin - human	A35804		•	62	1442
A;Title: Io	cal prot	T03903			62	1441
Genomics 28	hypothetical prote	F71921			5, c	1440
C;Accession	pnospnotransterase	S46952			5 6	س د
C;Date: 01-	hypothetical prote	T20799		•	62	w
C;Species:	amino acid transpo	A44432			62	4
MLN 64 prot	hypothetical prote	T20034			o 0	1435
T38027	hypothetical prote	AD3138		•	n on	1433
	ATP-binding transp	H98149		•	62	1432
	hypothetical prote	T02360	585 2		62	ωt
	hypothetical prote	S19424			60	1430
	protein P2 - Acyrt	T08869		•	n 60	1428
	nicotinic acetylch	ACCH2N		•	62	1427
1499	Ammonium transport	A96671			620	1426
	probable periplasm	B81914		•	62	1424
	rane	S66834		•	62	1423
	5	S53834			62	1422
1494	probable 3-oxoacyl	T05271			6 6	1421
1492	hypothetical prote	E64232			n 6 N 2	1419
1491 6	eff	AH1800		5.2	62	1418
1490 6	probable replicati	A84487		•	62	1417

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	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5	61.5
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	293 294	293	293	292	290	289	289	284	279	278
	N	N	N	N	N	N	N	N	N	N
ALIGNMENTS	AD0886	A83710 .	C90032	AE1539	AE0947	D86110	F91269	AC3429	AG0421	D83080
	probable oxidoredu	ABC transporter (p	hypothetical prote	sugar ABC transpor	ribonuclease BN (E	hypothetical prote	hypothetical prote	perosamine synthet	sugar transport sy	hypothetical prote

: Homo sapiens (man)
1-Nov-1996 #sequence\_revision 01-Nov-1996 #text\_change 09-Jul-2004
0n: 138027; S60682
tto, C.; Regnier, C.H.; Moog-Lutz, C.; Mattei, M.G.; Chenard, M.P.; Lidereau, R. 28, 367-376, 1995
1dentification of four novel human genes amplified and overexpressed in breast contains in the second contains and secon e type: mRNA s: 1-445 <RES> eferences: UNIPROT:Q14849; UNIPARC:UPI000012F1BC; EMBL:X80198; NID:g951278; PIDN ubmitted to the EMBL Data Library, July 1994 atch 55.6%; cal Similarity 56.2%; 135; Conservative 3 on: 138027 otein - human preliminary; translated 170 DPKVLPQEAEEERWYLAAQVAVARGPLLF9GALSEGQFYSPPESFAGSDNESDEEVAGKK 229 172 DFKVLPQEAEEENRLLIVQDASERAALI-PGGLSDGQFYSPPESEAGSE-EAEEKQDSEK 229 1 MSKLPRELTRDLERSLPAVASLGSSLSHSQSLSSHLLPPPE------KRRAISDV 1 MNHLP----EDMENAL-----TGSQSSHASLRNIHSINFTQLMARIESYEGREKKGISDV 51 ; Score 664; DB 2; ; Pred. No. 8.7e-55; 38; Mismatches 45 from GB/EMBL/DDBJ Length 445; Indels 22; Gaps 49

preliminary; translated from GB/EMBL/DDBJ e type: DNA spil-.cal protein F26F4.4 - Caenorhabditis elegans :: Caenorhabditis elegans :0-Sep-1999 #sequence\_revision 20-Sep-1999 #text\_change 09-Jul-2004 on: T16170 eferences: UNIPROT:Q19819; UNIPARC:UPI000017B938; EMBL:U12964; NID:g1213452; PII ental source: strain Bristol N2 to the EMBL Data Library, March 1996
tion: The sequence of C. elegans cosmid F26F4.
ce number: Z18471
on: T16170

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CSpecies: Sulfolobus Solfataricus
C;Date: 24-May-2001 #sequence_revision 24-May-2001 #text_change 09-Jul-2004
C;Accession: H90281
R;She, Q.; Singh, R.K.; Confalonieri, F.; Zivanovic, Y.; Allard, G.; Awayez, M.J.; Chanyon, I.; Jeffries, A.C.; Kozera, C.J.; Medina, N.; Peng, X.; Thi-Ngoc, H.P.; Redder, arrett, R.A.; Ragan, M.A.; Sensen, C.W.; Van der Oost, J.
submitted to GenBank, April 2001
A,Description: Sulfolobus solfataricus complete genome.
A,Reference number: A99139
A,Accession: H90281
glucose-1-phosphate thymidylyltransferase related protein PAB2433 - C;Species: Pyrococcus abyssi C;Date: 20-Aug-1999 #sequence_revision 20-Aug-1999 #text_change 09-J C;Accession: D75080 R;anonymous, Genoscope submitted to the EMBL Data Library, July 1999
                                                                                                                          RESULT 4
D75080
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A;Molecule type: DNA
A;Residues: 1-348 <KUR>
A;Cross-references: UNIPROT:Q97YQ0; UNIPARC:UPI00000643D5; GB:AE006641; NID:g13814471;
C;Genetics:
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A;Introns: 47/2; 81/2;
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Best Local S
Matches 56
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                                                                                                                                                                                                                                                                                                                                   129 TTAVTSAFLLAKVILSKLFSQGAF-GYVLPIISFILAWIETWFLDFKVLPQEAEEENRLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   122 KFIRI----SLFDIVLLÁVLRMLILGVVÝGICLVKQWYTVAFTTLASSAYILMKVLFYFN 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87
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                                                                                                                                                                                                                                                                                             FTTATIVFIVAGTIIGLLSAKSKFWEKVIAIIAVIHSSIPTWWLGF---
                                                                                                                                                                                                                                                                                                                                                                            N-----QPIIDKYFIQMYNLMRFDFGTAYP-LQAPSGSREVSSIIAYYLPN-----TILL 130
                                                                                                                                                                                                                                                                                                                                                                                                                     NVNGGIENTLEK-----EVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRLRHWWAIAL 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AQFSQTLFKNAHNLNSTQIQIAVEKY--RE-----
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                                                                                                                                                                                                               IAALAYAVKVFPPGGMTS---VPPPKN 202
                                                                                                                                                                                                                                                    IVQDASERAALIPGGLSDGQFYSPPES 214
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23.7%; Pred. No. 0.064;
tive 35; Mismatches
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                                                                #text_change 09-Jul-2004
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                                                                                                         Pyrococcus
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A;Molecule type: mRNA
A;Residues: 1-1911 <JEZ>
A;Cross-references: UNIPROT:O02038; UNIPARC:UPI000007C488; EMBL:U93075;
C;Superfamily: voltage-dependent calcium channel protein alpha-1 chain C;Keywords: transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                 calcium channel alpha-1 chain - Cyanea capillata
C;Species: Cyanea capillata
C;Species: Cyanea capillata
C;Date: 11-Jan-2000 #sequence_revision 11-Jah-2000 #text_change 09-Jul
C;Accession: T43048
R;Jeziorski, M.C.; Greenberg, R.M.; Clark, K.S.; Anderson, P.A.V.
J. Biol. Chem. 273, 22792-22799, 1998
A;Title: Cloning and functional expression of a voltage-gated calcium A;Reference number: Z22300; MUID:98380510; PMID:9712913
A;Accession: T43048
A;Status: preliminary; translated from GB/EMBL/DDBJ
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C;Superfamily:
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A; Residues: 1-424 < KAW >
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l Similarity 21.9%;
47; Conservative 2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PEDIKKARKLIVYTSVKGVGDGFISRHLNRKISTRISALLVEHVTPNOM----
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RVL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YSSYFDIFLLAVFREK-VLILAYAVCRLRHWWAIALTTAVTSAFL---
                                                                     FFTAMFTFEVTVKMIAFGVILHKRSFCRSFFNQLDLVIVAVSWAAIMLSRGSATSVVRIL
                                                                                                       FLLAVFRFKVLI--LAYAV------CR------LRHWWAIALTT-AVTSAFLLA 139
                                                                                                                                                                                                                   PEDVE--LGNPKSKNGTLRHMGETTSTEMSEGKEARIRPLRLSELNLLKDIPDPMPPESS
                                                                                                                                                                                                                                                   PEDMENALTGSQSSHASLRNIHSINPTQLM----ARIESYEGREKKGISDV------
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llarity 23.5%;
Conservative 3
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Pred. No. 0.
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Mismatches
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A;Attess, preliminary
A,Status; preliminary
A,Molecule type: DNA
A;Molecule type: DNA
A;Residues: 1-396 <PAR>
A;Residues: 1-396 <PAR>
A;Cross-references: UNIPROT:Q9PME5; UNIPARC:UPI00000C1F59; GB:AL139078; GB:AL111168;
A;Cross-references:UNIPROT:Q9PME5; UNIPARC:UPI00000C1F59; GB:AL139078; GB:AL111168;
A;Cross-references:UNIPROT:Q9PME5; UNIPARC:UPI00000C1F59; GB:AL139078; GB:AL111168;
A;Cross-references:UNIPROT:Q9PME5; UNIPARC:UPI00000C1F59; GB:AL139078; GB:AL111168;
A;Cross-references:UNIPROT:UPI00000C1F59; GB:AL111168;
A;Cross-references:UNIPROT:UPI00000C1F59; GB:AL139078; GB:AL1111168;
A;Cross-references:UNIPROT:UPI00000C1F59; GB:AL1111168;
A;Cross-references:UNIPROT:UPI00000C1F59; GB:AL1111168;
A;Cross-references:UNIPROT:UPI00000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UNIPROT:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;Cross-references:UPI0000C1F59; GB:AL111168;
A;Cross-references:UPI0000C1F59; GB:AL1111168;
A;C
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A;Experimental source: clone F38E11
C;Genetics:
A;Gene: CESP:F38E11.7
A;Map position: 4
A;Introns: 50/2; 118/1; 139/2; 189/:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Title: The genome sequence of the food-borne pathogen Campylobacter jejuni reveals A;Reference number: A81250; MUID:20150912; PMID:10688204 A;Accession: B81299
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C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T21969
R;Matthews, P.
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A; Residues: 1-767 <WIL>
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Best Local
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Best Local 9
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                                                                  FLLAV--FRFKVLILAYAVCR--LRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVL 156
                                                                                                                                     ATFSTLESALQSCDILVTTGGVSMGDFDFLKKAIKEYEIIIDKADIKPGRHIKIAKANEK 285
                                                                                                                                                                                                           VTFDLLFVTLLWIIELNVNGGIE----NTLEKEVMQYDYYSSYFDI-------
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21.0%; Pred. No. 3;
ive 35; Mismatches
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Pred. No. 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       49;
                                                                                                                                                                                                                                                                                                                                                                                                                           81;
   LLQPKDYICKAFLQGSYKKKT 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 396;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                      -AKNLNCDTRVFPLLKDDEK 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               61;
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R;Fraser, C.M.; Casjens, S.; Huang, W.M.; Sutton, G.G.; Clayton, R.; Lathigra, R.; son, D.; Peterson, J.; Kerlavage, A.R.; Quadkenbush, J.; Salzberg, S.; Hanson, M.; Bowman, C.; Garland, S.; Fujii, C.; Cotton, M.D.; Horst, K.; Roberts, K.; Hatch, Nature 390, 580-586, 1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 conserved hypothetical integral membrane protein BB0584 - Lyme disease spirochete C;Species: Borrelia burgdorferi (Lyme disease spirochete) C;Date: 13-Feb_1998 #sequence_revision 13-Feb-1998 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GDB:120593; OMIM:204200
A;Map position: 16p12.1-16p11.2
C;Superfamily: CLN3 protein/Battenin (Batten
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cell 82, 949-957, 1995
A;Title: Isolation of a novel gene underlying Batten disease,
A;Reference number: A57219, MUID:96016090, PMID:7553855
A;Accession: A57219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C;Species: Homo sapiens (man)
C;Date: 10-Nov-1995 #sequence_revision 10-Nov-1995 #text_change 31-Dec-2004
C;Accession: A57219
R;Lerner, T.J.; Boustany, R.M.N.; Anderson, J.W.; D'Arigo, K.L.; Schlumpf, R;Lerner, T.J.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
A57219
                                                                                                                                                                                                                                                                                                              A;Title: Genomic sequence of a Lyme disease spirochaete, A;Reference number: A70100; MUID:98065943; PMID:9403685 A;Accession: G70172
                                                                                                                                                                                                                                                                                                                                                                          Nature 390, 580-586, 1997
A; Authors: Smith, H.O.; Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: mRNA
A; Residues: 1-438 < LER >
                                                                                                                                                                                                                                          A; Molecule type: DNA
A; Residues: 1-448 < K
                                                                                                                                                                                                                                                                               A;Status: preliminary; nucleic acid sequence not
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: G70172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Gene: GDB: CLN3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Cross-references: UNIPROT:Q13286; UNIPARC:UPI00000000ED; GB:U32680; NID:g1039422; PIDN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Batten disease-related protein CLN3 - human
                                                                                                                                                                                            A; Experimental source: strain B31
                                                                                                                                                                                                                 A; Cross-references: UNIPROT: O51531; UNIPARC: UPI000005752F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .E.M.; de Vos, N.; van
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;Keywords:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Status: preliminary; not compared with conceptual translation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                               Matches
                                                                                                                                          Query Match
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                                                                                          Local Similarity
nes 47; Conserv
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  271
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 membrane protein
                                                                                                                                                                                                                                          1-448 <KLE>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PYLEFVACNIE--FKNGRILANLEGKKEGSSAIINNLNNKAALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PIISFILAWIETWFLDFKVLPQ-EAEEENKLLIVQDASERAALI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          R---SSLRCCRIRFTWALALLOCUNLVFLLADV---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KVLILAYAVCRLRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFIL----
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DTHKYAAYSISFSIYFIIFNIIHSFCISLNIMMGYEMHNSKKEIMKVAIYLSKIGLKLAF
                                             DVRRTFCLFVTFDLLFVTL----LWIIELNVNGGIE-NTLEKEVMQYDYYSS-----Y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EGLLGGAAYVNT----
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                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.2%;
                                                                                                                      24.4%;
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                                                                                               28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 85.5; DI
Pred. No. 3.4;
18; Mismatches
                                                                                                                      Score 85; DB Pred. No. 3.9;
                                                                                                  Mismatches
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                                                                                                  64;
                                                                                                                                             Length 448
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                                                                                                                                                                                                                                                                                                                                                                   Borrelia burgdorferi
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                                                                                                                                                                                                                      GB:AE001160; GB:AE000783;
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.A.; Meincke,
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Vugt,
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A;Title: Genome Sequence and Comparative Analysis of the A;Reference number: A96900; MUID:21359325; PMID:21359325 A;Accession: H97002 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-352 KUR>
                                                                                                                                                                                                                                                                                                     probable integral membrane protein [imported] - Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Species: Clostridium acetobutylicum C;Date: 14-Sep-2001 #sequence_revision 14-Sep-2001 #text_change 09-Jul-2004 C;Accession: H97002 R;Nolling, J.; Breton, G.; Omelchenko, M.V.; Markarova, K.S.; Zeng, Q.; Gib.; Daly, M.J.; Bennett, G.N.; Koonin, E.V.; Smith, D.R. J. Bacteriol. 183, 4823-4838, 2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R:Kuge, O.; Nishijima, M.; Akamatsu, Y.
J. Biol. Chem. 266, 24184-24189, 1991
A;Title: A Chinese hamster cDNA encoding a A;Reference number: A41680; MUID:92084729; A;Accession: A41680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPARC:UPI000013280F; GB:D10234; GB:D90468; NID:g220280; PIDN:BAA01
C;Superfamily: Caenorhabditis elegans hypothetical protein ZC506.3
C;Keywords: membrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Molecule type: mRNA
A; Residues: 1-471 < KUG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       integral membrane protein pssA - Chinese hamster C;Species: Cricetulus griseus (Chinese hamster) C;Date: 30-Jun-1992 #sequence_revision 30-Jun-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
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                Query Match
Best Local S
                                                                                                                              Cross-references: UNIPROT:Q97KT1; UNIPARC:UPI00000C9FCF; Experimental source: Clostridium acetobutylicum ATCC824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                           Genetics:
                                                                                                                           Experimental source:
Matches
                                                                                  CAC0835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          390 GAIMEGSVTFVYTIP-IAFVLA-----NYTNLPFE-----IIVFIPSLEDAIKLVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55 FCLFVTFDLLFVTLLWIIELNVNGGIENTLEKEVMQY-----DYYSSYFDIFLLAV 105
38;
h 7.0%; Score 83.5; D
Similarity 19.2%; Pred. No. 4.1;
38; Conservative 35; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LTSFVLFIFSFFAPYIFYTL-KYSHLIGIILRYSSVSAFFMALAFQYLFGFFRAGASPSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FWGWAMKALLIRSYGLC----WTISITWELTELF---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       F----RFKVLILAYAVCRLRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISF 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FLLFLNFEQVKSLMYW-LDPNLRYA---TREADIMEYAVNCHVITWERIVSHFDIFAFGH 172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SLP---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----FGYVLPIISFILAWIETWFLDFKVLPQEAEEENRLLIV-----QDASERAA 197
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24.4%; Pre-
22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 84.5; DI
Pred. No. 4.6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein essential PMID:1748687
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                                       DB 2;
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50;
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                                         Length 352;
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Indels
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                                                                                                                                                       GB:AE001437;
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75;
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Gaps
                                                                                                                                                       PIDN: AAK78811.1
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  8
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A;Title: Genome sequence of Yersinia pestis, the causative A;Reference number: AB0001; MUID:21470413; PMID:11586360 A;Accession: AE0302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sugar ABC transporter, permease protein YPO2476 [imported] - Yersinia pestis C;Species: Yersinia pestis C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
AE0302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           R;Parkhill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B. deno-Tarraga, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Davis, P.; Dougan, G.; il, M.; Rutherford, K.; Simmonds, M.; Skelton, J.; Stevens, K.; Whitehead, S.; Barrell, Nature 413, 523-527, 2001
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RESULT
S34960
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A; Residues: 1-291 < KUR>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C; Accession: AE0302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;Superfamily: inner membrane protein ugpA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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Best Local
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                                                                                                                                                                                                                                                                                85 EKEVMOYDYYSSYFDIFLLAVFRFKVLILAYAVCRLRHWWAIALTTAVTSAFLLAKV--- 141
                                                                                                                                                                                                                                                                                                                                                                     46
                                                                                                                                                                                                                                                                                                                                                                                                           44;
                                                                                  GLNSIPKEIYSAAELDN
                                                                                                                        DFKVLPQE----AEEEN
                                                                                                                                                                VAYSIVESKIPSONGPLNTFLYDWPGFTLPWLTSPDFAMLSIALVVTWKFVGYYGLILFS 176
                                                                                                                                                                                                    ----ILSKLFSQGA-----FGYVLPIIS-----FILAWIETW------FL 171
                                                                                                                                                                                                                                                MLNVMRFLMY--YLPIVFISSFLF----AFGLQKLKHG-----RTFVALSFLLANVSSG 116
                                                                                                                                                                                                                                                                                                                                                                     KGISDVRRTFCLFVTFDLLFVTLLWIIELNVN------GGIENTL-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LILSLVGGTFINYKIMPE 294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            I-----LAYAVCRLRHWWAIALTTAVTSAF-----LLAKVILSKLFSQGAFGYVLPIIS 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VVNGAVIIRDREĖNTYYRYMYSPNSKFEYIFGNVIYNYIFSYIQLFIANSLMAIFGIYIG 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NVNGGI - - - - ENTLEKEVMQ - -
                                                                                                                                                                                                                                                                                                                            KQVGSVLAASYLGYTSIFWFYPFIWLAVLSLTEWRFVGIPTFNGLNNFILVMQDPLFWKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILAWIETWFLDFKVLPQ 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ISFLKMLSYGL------ILTLVMTTFGTFIVCIFNKELYANMFSAA-----IS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EFYNVRDKKTNEDMKKLIKAYLVQNKTLNMERIVKDEQIGGLSKSERIIAFLATVLLITS 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ESYEGREKKGISDVRRTFCLFVTFD-----
                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                            6.9%;
                                                                                                                          184
                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 83; DB; Pred. No. 3.6; 26; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ------ 74
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                                                                                                                                                                                                                                                                                                                                                                                                             57;
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NADH2 dehydrogenase (ubiquinone) (EC 1.6.5.3) chain 5 - Crithidia oncopelti mitochondrior C;Species: mitochondrion Crithidia oncopelti C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: S34960 R;Maslov, D.A.; Horvath, A.; Gwang II, K.; Kolesnikov, A.A. submitted to the EMBL Data Library, October 1990 A;Reference number: S34958 A;Accession: S34958 A;Accession: S34958 A;Accession: S34958 A;Cross-references: UNIPROT:Q34192; UNIPARC:UPI000008E400; EMBL:X56015; NID:g12879; PIDN C;Genetics: UNIPROT:Q34192; UNIPARC:UPI000008E400; EMBL:X56015; NID:g12879; PIDN C;Genetics:
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RESULT 15
C64227
                  Science 270, 397-403, 1995
A;Title: The minimal gene complement of Mycoplasma genitalium.
A;Title: The minimal gene complement of Mycoplasma genitalium.
A;Reference number: A64200; MUID:96026346; PMID:7569993
A;Accession: C64227
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
                                                                                                                                                                                                    hypothetical protein homolog MG247 - Mycoplasma genitalium C;Species: Mycoplasma genitalium C;Species: Mycoplasma genitalium C;Date: 10-Sep-1999 #sequence_revision 10-Sep-1999 #text_change 09-Jul-2004 C;Accession: C64227
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A;Genome: mode: SGC6
C;Superfamily: NADH dehydrogenase (ubiquinone) chain 5
C;Keywords: membrane-associated complex; mitochondrion; NAD; oxidative phosphorylation;
                                                                                                                                R;Fraser, C.M.; Gocayne, J.D.; White, O.; Adams, M.D.; Clayton, R.A.; Fleischmann, M.; Fuhrmann, J.; Nguyen, D.; Utterback, T.R.; Saudek, D.M.; Phillips, C.A.; Merrio, C.A.; Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Accession: B29835
A;Status: preliminary
A;Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J. Bacteriol. 166, 713-721, 1986
A; Title: Nucleotide sequence of the surface exclusion genes
A; Reference number: A29835; MUID:86223783; PMID:3011738
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J. Bacteriol. 166, 713-721, 1986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C;Species: Escherichia coli
C;Date: 04-Aug-1988 #sequence_revision 04-Aug-1988 #text_change 09-Jul-2004
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A; Molecule type: DNA
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                   166 IETWFLDFKV 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   116 AVCRIRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPII--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          107 RFKVLILAYAVCRLRHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLL----AVFRFKVLILAY 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1-186 <FIN>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    h 6.9%; Score 82.5; Di Similarity 23.8%; Pred. No. 2.4;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NLVSLK----ISLGSEITEQSVLLKLVERKINSYGQFLMVVNAIVGCVLLSSGERFVAGL 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FQLLFI----IFDIFINSNVR----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24; Mismatches
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A;Residues: 1-239 <TIGR>
A;Cross-references: UNIPROT:P47489; UNIPARC:UPI00001394F7; GB:U39703; GB:L43967; NID:g384
A;Experimental source: strain G-37
C;Genetics:
A;Genetic code: SGC3
C;Superfamily: Escherichia coli ygiH protein
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                               136 FLLAKVILSKLFSQGAFGYVLPIISFILAWIE 167
159 VSLASLITF-----FVLAVI-ILIPWLD 180
                                                                                                                                   42
                                                                                                 93 YYSSYFDIFLLAV-----FRFK----VLILAYAVCRLRHWWAI------ALTTAVTSA 135
                                                                                                                                                                   42 GREKKGISDVRRTF------CLFVTFDLLFVTLL-WIIELNVNGGIENTLEKEVMQYD
                                                                                                                                                                                                  Similarity
33; Conserv
                                                                YFLSYLSCFAATIGHIFFLYFKFKGGKAIATTGGSLLAISLWWFLICLLIWIMITLITKY 158
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Q8HEHB_9ACAR
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Q840W7_STRMU
Q7RTBS_PLAYO
Q56R8_BRASE
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Q54W1_RANCA
Q60U6_CAEBR
Q4HDY8_CAMCO
Q52R8_CHICK
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Q571L6 NEUCR
Q7571L6 NEUC
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Q82TB7_EBGPH
PTSS1_CRIGR
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Q9JF90_VACCTT
Q6A0BS_MOUSE
Q9JF90_VACCTT
Q65U88_MANGM
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EMBL; AY358645; AAQ89008.1; -; mRNA.
EMBL; AC036033; AA807552.1; -; Genomic_DNA.
EMBL; BC003074; AAH03074.1; -; mRNA.
EMBL; BC005959; AAH05959.1; -; mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
-!- SUBCELLULAR LOCATION: Integral membrane protei
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blakesley R.W., Touchman J.W., Green B.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human "Generation and initial analysis of more than 15,000 full-length human
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European
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SIMILARITY: Contains 1 MENTAL
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Comment=2 isoforms, 1 (show
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ALTERNATIVE PRODUCTS:
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                                                                                                                                                                                                                                                                         MNHLPEDMENALTGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFCLFVT
                                                                                               EEENRLLIVQDASERAALIPGGLSDGQFYSPPESEAGSEEAEEKQDSEKPLLEL
                                                                                                                                                                                                       FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL
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                                                                                                                                                                                                                                                                                                                                                                  234 AA;
    (TrEMBLrel. 29,
                              PRELIMINARY;
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75
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172
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                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                          100.0%;
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MLN64 N-terminal domain homolog,
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Potential.
Cytoplasmic (Potential).
Potential.
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Pred. No. 8.
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3.6e-101;
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MOUSE

Name=Stard3nl; Synon Mus musculus (Mouse) Eukaryota; Metazoa;

Synonyms=Mentho;

:ation update)
(STARD3 N-terminal-like)

protein)

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Chordata; Craniata; Vertebrata;

Euteleostomi;

MENTO MOUSE STANDARD; PRT; 235 AA (9DCCI3; Q9DC3; Q9DC3; QSD356; QSD35

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
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Best Local
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TISSUE=Ovary;
TISSUE=Ovary;
TISSUE = Ovary;
TISS
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Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurogna;
Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 mouse cDNA sequences.";
c. Natl. Acad. Sci. U.S.A.
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                                                     EEENRLLIVQDASERAALIPGGLSDGQFYSPPESEAGS-EEAEEKQDSEKPLLEL
                                                                                                                                                                             RHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVLPQEA
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                                                                                                                                                                                                                                                                                                                                                                                                   FDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MNHLPEDMENTLTGSQSSHASLRDIHSINPGQLMARIESYEGREKKGISDVRRTFCLFVT
    EEENRLILVQDASERAALIPAGLSDGQFYSPPESEAGSEEEAEEKQDSEKPLLEL
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collaboration

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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetcw K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Zeeberg B., Buetcw K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., McDeva P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Mhiting M., Madan A., Schein J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Wyers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Wyers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human rand mouse cDNA sequences.";
RI Proc. Natl. Acad. Sci. U.S.A. 99:16899-16901(2002).
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MEDLINE=22388257; Put
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Muroidea;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE=22354683;
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ALTERNATIVE PRODUCTS:
Event = 11 to -----
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                                          SIMILARITY:
CAUTION: Ref
                                          Note=No experimental confirm
[MILARITY: Contains 1 MENTAL
AUTION: Ref.1 (BAB31166) sequ
                                                                                                                                                                                                                                             IsoId=Q9DCI3-1; Sequence=Displayed;
                                                                                                                                                                 IsoId=Q9DCI3-2; Sequence=VSP_003909;
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420:563-573(2002).
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Muridae; N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PubMed=12477932; DOI=10.1073/pnas.242603899;
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MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Berge J.G., Klausner R.D., Collins F.S., Wagner L., Schenmen C.M., Schuler Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N. Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.
                                                                                                   Eukaryota; Metazoa; Chordata; Actinopterygii; Neopterygii; Cyprinidae; Danio.
                                                                                                                                            Zgc:86628.
ORFNames=zgc:86628;
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                                                       TISSUE=Embryo
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AK018331; BAB31166.1;
BC003334; AAH03334.1;
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Teleostei; Ostariophysi; Cypriniform
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Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Ra Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

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Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Rahay J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,

Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

A Whiting M., Touchman J.W., Green E.D., Dickeon M.C.,

Balakesley R.W., Touchman J.W., Green E.D., Dickeon M.C.,

A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,

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25-OCT-2004
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MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899; Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Klausner R.D., Collins F.S., Wagner L., Schenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xenopus tropicalis (Western clawed frog) (Silurana tropicalis).
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
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EMBL; BC075752; AAH75752.1; -; mRNA.
ZFIN; ZDB-EGENE-040718-4; Z9G:86628.
SEQUENCE 227 AA; 25485 MW; 24C46AD8FF4985C
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(TrEMBLrel. 28, Last sequence update)
(TrEMBLrel. 28, Last annotation update)
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DR EMBL; BC076666; AAH76666.1; -;
DR SMR; Q6DFR7; 236-443.
DR GO; GO:0005739; C:mitochondrion,
R GO; GO:0015485; F:cholesterol bi
R GO; GO:0017127; F:cholesterol tr:
R GO; GO:0008289; F:lipid binding.
GO; GO:0006869; P:lipid
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SMR; QGDERT; 236-443.
GO; GO:0005739; C:mitochondrion; IEA.
GO; GO:0015485; F:cholesterol binding; IEA.
GO; GO:0017127; F:cholesterol transporter act:
GO; GO:0008289; F:lipid binding; IEA.
GO; GO:0008869; F:lipid transport; IEA.
GO; GO:0006869; P:steroid biosynthesis; IEA.
GO; GO:0006694; P:steroid biosynthesis; IEA.
InterPro; IPR000799; START.
InterPro; IPR002913; START.
PFAMM; PFO1852; START; 1.
R PRINTS; PR009798; STARFROTEIN.
R SMART; SM00234; START; 1.
R PROSITE; PS50848; START; 1.
R PROSITE; PS50848; START; 1.
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                                                                                                                                                                                                                         Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Ver
Amphibia; Batrachia; Anura; Mesobatrachia;
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05-JUL-2004 (TrEMBLrel.
05-JUL-2004 (TrEMBLrel.
MGC68989 protein.
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                                                                                                                                                                                                  Xenopodinae;
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, Last sequence up
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TISSUE-Spleen;
MEDLINE-22388257; PubMed-12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Strausberg R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler
Klausner R.D., Collins F.S., Wagner L., Schaefer C.F., Bhat N.
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.

. D . ,

NUCLEOTIDE SEQUENCE.

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SORRED DER RELEGIOR DE REPRESENTA DE RESERVA RESULT 7
QGGNT3 XENLA
ID QGGNT3_XENLA PRELIMINARY;
AC QGGNT3;
DT 05-JUL-2004 (TrEMBLrel. 27,
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RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.,
"Generation and initial analysis of more than 15,000 full-length human
"T and mouse cDNA secunerces" "
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Best Local S
Matches 140
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Submitted (SEP-2003) to the EN EMBL; BC057738, AAH57738.1; -;
SMR; Q6FP40; 232-439.
GO; GO:0005739; C:mitochondrio GO; GO:0015485; F:cholesterol GO; GO:0008289; F:lipid binding GO; GO:000889; F:lipid binding GO; GO:000689; P:lipid transpo GO; GO:0006694; P:steroid biosv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Richardson
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRINTS; PR00978; STARPROTEIN.
SMART; SM00234; START; 1.
PROSTITE; PS50848; START; 1.
SEQUENCE 444 AA; 50572 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         InterPro; IPR000799; StAR.
InterPro; IPR002913; START.
Pfam; PF01852; START; 1.
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GO:0015485; F:cholesterol binding; IEA.
GO:0017127; F:cholesterol transporter ac
GO:0008289; F:lipid binding; IEA.
GO:0006869; P:lipid transport; IEA.
GO:0006694; P:steroid biosynthesis; IEA.
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                                                                                                                                                                                                                                                                                                                                                                                      RHWWAIALTTAVTSAFLLAKVILSKLFSQGAFGYVLPIISFILAWIETWFLDFKVLPQEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MTKIPGDFQPDLERSLPAIASMSQSHVFSPRSLLPR-----EQRRAISDVRRTFCLFVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FDLLFVTLLWIIBLNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYAVCRL 120
                                                                                                                                                                                                                                                                                  EEENRLLIVODASERAALI-PGGLSDGOFYSPPESEAGSEEAEEKODSEK
                                                                                                                                                                                                                                                                                                                                                   RHWWAIAITTLVTSAFLIVKVIQSGLLSKGAFGYVLPIVSFVLAWLETWFLDFKVLTQEA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FOLLFISLLWITELNINGIEKNLEEEILYYDFKNSFFDIFLLAVFRFSVLILAYAIVRL
                                                                                                                                                                                                                        EEERWYIAAQAAATHPSLLYNGALSDGQFYSPPESFAGSD--NEFDDEEE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58.5%; Score 698.5; DB 2
60.9%; Pred. No. 4.2e-55;
bive 30; Mismatches 51
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L.H., Shenmen C.M., Schuler G.D.,
RA Klausner R.D., Collins F.S., Wagner L.H., Shenmen C.M., Schuler G.D.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Fearmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
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RA Richards S., Wocley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Hakesley R.W., Touchman J.W., Green E.J., Lu X., Gibbs R.A.,
RA Hakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E.,
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.",
RT Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
                                                                                                                                                   Query Match
Best Local
                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-2004 (TrEMBLrel. 05-JUL-2004 (TrEMBLrel. MGC80895 protein.
                                                                                                                                                                                                                                                                                                                                       GO; GO:0005739; C:mitochondrion; IEA.
GO; GO:0015485; F:cholesterol binding; I
GO; GO:0017127; F:cholesterol transporte
GO; GO:0008289; F:lipid binding; IEA.
GO; GO:0006869; P:lipid transport; IEA.
GO; GO:0006694; P:steroid biosynthesis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Klein S., Gerhard D.S.; Submitted (JUN-2004) to the EMBL/GenBank/DDBJ EMBL; BC073419; AAH73419.1; -; mRNA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Name=MGC80895;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Richardson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174; Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Embryo,
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                                                                                                                                                                                                       PRINTS; PR00978; STARPROTEIN.
SMART; SM00234; START; 1.
PROSITE; PS50848; START; 1.
SEQUENCE 448 AA; 51279 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Embryo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUCLEOTIDE SEQUENCE.
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                                                                                                                                                                                                                                                                                    Pfam; PF01852; START;
                                                                                                                                                                                                                                                                                                    InterPro; IPR000799; StAR. InterPro; IPR002913; START.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SMR; Q6GNT3; 236-443.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dev. Dyn.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            initiative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Genetic and genomic initiative.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TISSUE=Embryo;
                     57
                                                          Н
                                                                                                                                                   Similarity
LFVTFDLLFVTLLMIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVLILAYA 116
                                                          MTKLPGEFQPDLERSLPAIASINSSMSHNHVFSPHSLLPR-----EQRRLISDVRRTFC
                                                                              MNHLP----EDMENALTGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDVRRTFC
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                                                                                                                                   Conservative
                                                                                                                                                     57.2%;
59.7%;
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27,
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Last annotation updat
                                                                                                                                                     Score 684; DB 2
Pred. No. 9e-54;
                                                                                                                                                                                                                                                                                                                                                                                                    transporter
                                                                                                                                                                                                           472FF8E7C3B2F5E4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Xenopus
                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     IEA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 research: The NIH Xenopus
                                                                                                                                                                                                                                                                                                                                             IEA
                                                                                                                                                                      DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                    activity; IEA
                                                                                                                                     48;
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                                                              A Strausberg R.D., Feingold E.A., Grouse L.H., Derge J.G.,
A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buctow K.H., Schaefer C.F., Bhat N.K.,
A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Boat S. S., Loquellano K., Farmer A.A., Rubin G.M., Hong L.,
A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunarathe P.H.,
A Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
VA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
A Miting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
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A Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Cherrath A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MLN64 HUMAN S
Q14849; Q96HM9;
30-MAY-2000 (Rel
30-MAY-2000 (Rel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDLINE=96039245; PubMed=7490069;
Tomasetto C.L., Regnier C.H., Moog-Lutz C., Mattei M.-G.,
Chenard M.-P., Lidereau R., Basset P., Rio M.-C.;
"Identification of four novel human genes amplified and overexpressed in breast carcinoma and localized to the q11-q21.3 region of chromosome 17.";
Genomics 28:367-376(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-MAY-2000 (Rel. 39, Created)
30-MAY-2000 (Rel. 39, Last sequence update)
10-MAY-2005 (Rel. 47, Last annotation update)
MLN 64 protein (StAR-related lipid transfer protein domain-containing protein 3) (CABI protein).
Name=STARD3; Synonyms=CAB1, MLN64;
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                             TISSUE=Lung, Skin, and Spleen;
MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                  Akiyama N., Sasaki H., Ishizuka T., Kishi T., Sakamoto H., Onda M., Akiyama N., Sasaki H., Ishizuka T., Terada M.; Hirai H., Yazaki Y., Sugimura T., Terada M.; "Isolation of a candidate gene, CABI, for cholesterol transport to mitochondria from the c-ERBB-2 amplicon by a modified cDNA selection
                                                                                                                                                                                                                                                                                                                                                   NUCLEOTIDE
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TISSUE=Oesophageal carcinoma; MEDLINE=97413641; PubMed=9270027;
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               X-RAY CRYSTALLOGRAPHY
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                                                      cDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                 SEQUENCE [LARGE SCALE MRNA].
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Metazoa;
                                         Acad.
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 PubMed=10802740; DOI=10.1038/75192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini; Hominidae;
               (2.2
                                         U.S.A.
               ANGSTROMS) OF 216-445
                                         99:16899-16903 (2002)
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EMBL; D38255; BAA22525.1; -; mRNA.
EMBL; BC008356; AAH08356.1; -; mRNA.
EMBL; BC008747; AAH08747.1; -; mRNA.
EMBL; BC025679; AAH25679.1; -; mRNA.
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                                                                                                                                                                                                                                                                                                                                                                                                     GO; GO:0006839; P:mitochondrial trans
GO; GO:0008202; P:steroid metabolism;
InterPro; IPR000799; StAR.
InterPro; IPR002913; START_lipid_bd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PDB; 1EM2; X-ray; A=216-444.
Ensembl; ENSG00000131748; Ho
HGNC; HGNC:17579; STARD3.
                                                                                                                                                                                                                           TOPO
                                                                                                                                                                                                                                                                                                                                    PROSITE; PS50848; START; 1.
3D-structure; Lipid transport;
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GO:0008203; P:cholesterol metabolism; TAS.
GO:0006629; P:lipid metabolism; TAS.
GO:0006839; P:mitochondrial transport; TAS.
GO:0006839; P:steroid metabolism; TAS.
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SM00234; START; 1.
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52 72
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AAH08356/AAH25679). AAH25679).

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MEDLINE-21264925; PubMed=11053434; DOI=10.1074/jbc.M006279200; Alpy F., Stoeckel M.-E., Dierich A., Escola J.-M., Wendling C., Chenard M.-P., Vanier M.T., Gruenberg J., Tomasetto C., Rio M.-C.; "The steroidogenic acute regulatory protein homolog MLN64, a late endosomal cholesterol-binding protein."; Biol. Chem. 276:4261-4269 (2001).

J. Biol. Chem. 276:4261-4269 (2001).

-i- SUBCELLUIAR LOCATION: Integral membrane protein. Late endosoma.
                             This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its
                                                                                                                                                                                                                                         membrane protein.
SIMILARITY: Contains 1 MENTAL domain.
SIMILARITY: Contains 1 START domain.
DATABASE: NAME-Atlas Genet. Cytogenet.
                                                                                                                                                                                                  DATABASE: NAME=Atlas Genet. Cytogenet. Oncol. Haematol.;
WWW="http://www.infobiogen.fr/services/chromcancer/Genes/MLN64ID202.html".
long as its content is in no way modified and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ., Hurley J.H.; nd lipid transport mechanism of a StAR-related domain."; Biol. 7:408-414(2000).
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RESULT
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ID Q5
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Q53Y53;
13-SEP-2005 (TrEMBLrel. 31,
13-SEP-2005 (TrEMBLrel. 31,
13-SEP-2005 (TrEMBLrel. 31,
START domain containing 3.
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                                                                                                                                                             "Cloning of human full-length CDSs in vector.";
                                                                                                                                                                                                 NUCLEOTIDE SEQUENCE.
Kalnine N., Chen X., Rolfs A., Halleck A., Hines
Koundinya M., Raphael J., Moreira D., Kelley T.,
Phelan M., Farmer A.;
                                                                                                                                                                                                                                                                                                                               Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
                                                                                                           SEQUENCE
                                                                                                                                            Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases
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HUMAN
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                                                                                                                             BT006964; AAP35610.1;
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1 MNHLP----EDMENAL-----TGSQSSHASLRNIHSINPTQLMARIESYEGREKKGISDV
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                                       Conservative
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etazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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56.2%;
                                   55.6%; Score 664; DB 2
56.2%; Pred. No. 6e-52;
tive 38; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38;
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Last sequence up
Last annotation
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Pred. No. 6e-52;
                                                                                                           62BED5C3EDA0DDEF CRC64;
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LaBaer J., Lin
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Raha S.S., Morley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Richards S., Worley K.C., Hale S., Gardia A.M., Gay L.J., Hulyk S.W.,
RA Rahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
RA Rahesley R.W., Touchman J.W., Green E.J., Lu X., Gibbs R.A.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human rand mouse cDNA seemences.""

"Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.MAY-2000 (Rel. 39, Last sequence update)
10.MAY-2005 (Rel. 47, Last annotation update)
MLN 64 protein (StAR-related lipid transfer protein domain-containing protein 3) (BS 64 protein).
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Q61542;
                                                                                                                                  pand mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
-:- FUNCTION: Binds and transports cholesterol. Promotes
steroidogenesis in placenta and brain (By similarity).
-:- SUBCELLULAR LOCATION: Integral membrane protein. Late
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tomasetto C.L., Regnier C.H., Moog-Lutz C., Mattei M.-G., Chenard M.-P., Lidereau R., Basset P., Rio M.-C.; "Identification of four novel human gentes amplified and oven breast carcinoma and localized to the gll-g21.3 region
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
Muroidea; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Name=Stard3; Synonyms=Es64, Mln64;
Mus musculus (Mouse).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUCLEOTIDE SEQUENCE
This Swiss-Prot entry is copyright. It is produced between the Swiss Institute of Bioinformatics and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA].
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genomics 28:367-376(1995).
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                                                                  membrane protein (By similarity).
SIMILARITY: Contains 1 MENTAL domain
SIMILARITY: Contains 1 START domain.
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RESULT 11
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ID Q5U2T5;
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DE Hypothetical
GN Name-LOC36367
OS Rattus norveg
OC Rattus norveg
OC Eukaryota; Me
OC Muridae; Muri
OX NCBL TaxID=10
RN NCBL TaxID=10
RN [1]
RN NUCLEOTIDE SE
RC TISSUE-Heart;
RX MEDLINE=22388
RX MEDLINE=22388
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Matches 133
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Ensembl; ENSWUSGO000001816
MGI; MGI:1929618; Stard3.
GO; GO:0016021; C:1nfc.
GO; GO:0006021; C:1nfc.
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Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                    Hypothetical LC Name=LOC363675;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SMART;
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                      TISSUE=Heart;
MEDLINE=22388257;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GO; GO:0016021; C:integral to membrane; GO; GO:0005770; C:late endosome; TAS. InterPro; IPR002799; StAR. InterPro; IPR002913; START lipid_bd.
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HSSP; Q14849; 1EM2
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SM00234; START; 1.
E; PS50848; START; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                              EERWYLAAQAAVARGPLLFSGALSEGQFYSPPESFAGSDNESDEEVTGKK
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  R.L., Feingold
                                                              SEQUENCE
                                                                                                                                                                                                                                                                                                                 PRELIMINARY;
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  PubMed=12477932; DOI=10.1073/pnas.242603899;
Feingold E.A., Grouse L.H., Derge J.G.,
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Cytoplasmic
MENTAL.
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3; Mismatches
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Pred. No. 2.
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Potential.
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                                                                                                                                                             Euteleostomi;
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JLT 12 IC3 MOUSE Q544C3 MOUSE Q544C3; Q544C3;

PRELIMINARY;

PRT;

446

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13-SEP-2005 (TrEMBLrel. 31, Created)
13-SEP-2005 (TrEMBLrel. 31, Last sequence update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
13-SEP-2005 (TrEMBLrel. 31, Last annotation update)
3 days neonate thymus cDNA, RIKEN full-length enriched library,
clone:A630020B16 product:steroidogenic acute regulatory protein

Name=Stard3;

related, full insert

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SEQUENCE 4
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pfam; PF01852; START;
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InterPro; IPR002913; START.
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GO:0015485; F:cholesterol binding; IEA.
GO:00117127; F:cholesterol transporter a
GO:0008289; F:lipid binding; IEA.
GO:0006869; P:lipid transport; IEA.
GO:0006694; P:steroid biosynthesis; IEA.
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c. Natl. Acad. Sci. U.S.A.
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                                                                                                                   RRTFCLFVTFDLLFVTLLWIIELNVNGGIENTLEKEVMQYDYYSSYFDIFLLAVFRFKVL
                                                                                        DFKVLPQEAEEERWYLAAQAAVARGPLLFSGALSEGQFYSPPESFAGSDSESDEEVAGKK
                                         DEKVLPQEAEEENRLLIVQDASERAALI-PGGLSDGQFYSPPESEAGSE-EAEEKQDSEK
                                                                                                                                                                                     RRTFCLFVTFDLLFISLLWIIELNTNTGIRKNLEQEVIHYSFQSSFFDIFVLAFFRFSGL
                                                                                                                                                                                                                                                                                  MSKLPGDLAGDLERSLPALASLGTSLSHSQSLSSHFIPPPLEKRRV------VSDV
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446 AA; 5
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                                                                                                                                                                                                                                                                                                                                                                                                56.2%;
                                                                                                                                                                                                                                                                                                                                                                       ; Score 656.5; DB 2; Pred. No. 2.9e-51; 32; Mismatches 52
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-; mRNA.
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RA Okazaki Y., Furuno M., Kasukawa T., Adachi J., Bono H., Kondo S.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Nikaido I., Osato N., Saito R., Suzuki H., Yamanaka I., Kiyosawa H.,
RA Yagi K., Tomaru Y., Hasegawa Y., Nogami A., Schonbach C., Gojobori T.,
RA Baldarelli R., Hill D.P., Bult C., Hume D.A., Quackenbush J.,
RA Baldarelli R., Hill D.P., But C., Chothia C., Corbani L.B., Cousins S.,
RA Blake J.A., Bradt D., Brusic V., Chothia C., Corbani L.B., Cousins S.,
RA Gasterland T., Gariboldi M., Gissi C., Godzik A., Gough J.,
RA Grimmond S., Gustincich S., Hirokawa N., Jackson I.J., Jarvis E.D.,
RA Kanai A., Kawaji H., Kawasawa Y., Kedzierski R.M., King B.L.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Konagaya A., Kurochkin I.V., Lee Y., Lenhard B., Lyons P.A.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Maglott D.R., Maltais L., Marchionni L., McKenzie L., Miki H.,
RA Nagashima T., Numata K., Okido T., Pavan W.J., Pertea G., Pesole G.,
RA Petrovsky N., Pillai R., Pontlus J.U., Qi D., Ramachandran S.,
RA Ravasi T., Reed J.C., Reed D.J., Raid J., Ring B.Z., Ringwald M.,
RA Sultana R., Takenaka Y., Taylor M.S., Teasdale R.D., Tomita M.,
RA Wilming L.G., Wynshaw-Boris A., Yanagisawa M., Yang I.,
RA Wilming L.G., Wynshaw-Boris A., Vanagisawa M., Yang I.,
RA Hirozane-Kishikawa T., Konno H., Nakamura M., Sakazume N., Sato K.,
RA Shiraki T., Waki K., Kawai J., Aizawa K., Arakawa T., Fukuda S.,
RA Miyazaki A., Sakai K., Sasaki D., Shibata K., Shinagawa A.,
RA Yasunishi A., Yoshino M., Waterston R., Lander E.S., Rogers J.,
RA Birney E., Hayashizaki Y.,
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RA Arakawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arakawa T., Hara A., Fukunishi Y., Konno H., Adachi J., Fukuda S.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Alzawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamanaka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Battalov S., Casavant T.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Kuchi P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml L.M., Staubli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Schriml K., Okido T., Frunno M., Aono H., Baldarcelli R., Barsh G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
RA Bromstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
RA Sasaki H., Sato K., Wang K.H., Weitz C., Whittaker C., Wilming L.,
RA Wynshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohtsuki S.,
RA Hayashizaki Y.,

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"High-efficiency full-length cDNA
Meth. Enzymol. 303:19-44(1999).
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MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
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MEDLINE=20499374; PubMed=11042159; DOI=10.1101/gr.145100;
                                                           STRAIN=C57BL/6J; TISSUE=Thymus;
                                                                                                                                                                                                                           "Analysis of the mouse trans
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
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& Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,

& Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,

& Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,

& Hori F., Imotani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,

& Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,

& Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,

& Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,

& Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,

& Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,

& Tagawa A., Takahashi F., Takaka-Akahira S., Takeda Y., Tanaka T.,

& Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;

& Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
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Best Local 9
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MEDLINE-20530913, PubMedcil1076861; DOI=10.1101/gr.152600;

MEDLINE-20530913, PubMedcil1076861; DOI=10.1101/gr.152600;

Shibata K., Itch M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,

Shibata K., Itch M., Aizawa K., Kitsunai T., Tashiro H., Itch M.,

Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itch M.,

Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,

Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,

Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Yoneda Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

"RIKEN integrated sequence analysis (RISA) system-384 format

sequencing pipeline with 384 multicapillary sequencer.";

Genome Res. 10:1757-1771(2000).
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28-FEB-2003 (Rel. 41, Created)
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10-MAY-2005 (Rel. 47, Last annotation update)
110-MAY-2005 (Rel. 47, Last annotation update)
110-MAY-2005 (Rel. 47, Last annotation update)
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HSSP; Q14849; 1EM2.
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Submitted (AUG-2003)
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NCBI_TaxID=7955;
                                                                                                                                                                                                                                                                                                                                                                                        Chromosome 3
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SMART; SM00234; START; 1.
PROSTITE; PS50848; START; 1.
Lipid transport; Lipid-binding; Steroidogenesis; Transport.
Lipid transport; Lipid-binding; Steroidogenesis; Transport.
DOMAIN 23 45 START.
CONPELICT 210 220 YSPESILAGSE -> PGRPRVRPRVR (in SEQUENCE 448 AA; 50751 MW; 716A18C127B59C5D CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q9DFS4; 232-443
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(TrEMBLrel. 31, Last sequence up
(TrEMBLrel. 31, Last annotation
3 SCAF14700, whole genome shotgun
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DESCRIPTION OF SERVICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
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A Maucell E., Bouneau L., Fischer C., Ozouf-Costaz C., Bernot A.,
A Micaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B.,
A Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S.,
A Anthouard V., Jubin C., Castelli V., Katlnka M., Vacherie B.,
A Anthouard V., Jubin C., Castelli V., Katlnka M., Vacherie B.,
A Biemont C., Skalli Z., Cattolico L., Poulain J., De Berardinis V.,
A Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A Cruaud C., Duprat S., Brottier P., Coutanceau J.P., Gouzy J.,
A Parra G., Lardier G., Chapple C., McKernan K.J., McBwan P., Bosak S.,
A Parra G., Lardier G., Chapple C., McKernan K.J., McBwan P., Bosak S.,
A Kellis M., Volff JN., Guigo R., Zody M.C., Mesicov J.,
A Kellis M., Schachter V., Quetier F., Saurin W., Scarpelli C.,
A Laudet V., Schachter V., Quetier F., Saurin W., Scarpelli C.,
Wincker P., Lander E.S., Weissenbach J., Roest Crollius H.;
"Genome duplication in the teleost fish Tetraodon nigroviridis reveals
"The early vertebrate proto-karyotype.";
"In Nature 431:946-957(2004).
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01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last sequence update)
01-FEB-2005 (TrEMBLrel. 29, Last annotation update)
Hypothetical protein DKFZp469E1839.
Name=DKFZp469E1839;
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[2]
                        The German cDNA Consortium; Ottenwaelder B., Obermaier B., Deutschenbaur S., Schaipp Mewes H.W., Weil B., Amid C., Osanger A., Fobo G., Han M Submitted (NOV-2004) to the EMBL/GenBank/DDBJ databases.
                                                                                                                               TISSUE=Kidney
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Eukaryota; Metazoa; Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VTTLVTCVFLVVKLILSNNNANSGSDNLLSQNAFGYVLPITSFVVAWLETWFLDFKVLTQ
                                                                                                                                                                                                                                                                    Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1
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444
                                                                                                                                                             SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRELIMINARY;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAG02839.1;
                                                                                                                                                                                                                                                              Chordata; Craniata; Vertebr
Euarchontoglires; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50312 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              49.1%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 586.5;
Pred. No. 7.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0A2E1D687EDB2C41 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genomic_DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                    Vertebrata; Euteleostomi;
rimates; Catarrhini; Homin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .2e-45;
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                                                   Schaipp A.
Han M.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27;
                                                                                                                                                                                                                                                                         Hominidae;
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                                                                                                                                                                                                                                                                Query Match 47.4%; Score 566; DB 2; Length 501; Best Local Similarity 51.2%; Pred. No. 6.2e-43; Matches 123; Conservative 31; Mismatches 38; Indels
                                                                                                                                                                                                                                                                                                                   R SMR; Q5RB70; 204-385.

R GO; GO:0005739; C:mitochondrion; IEA.

GO; GO:0015485; F:cholesterol binding; IEA.

R GO; GO:0017127; F:cholesterol transporter activity; IEA.

R GO; GO:0008289; F:lipid binding; IEA.

R GO; GO:0006869; P:lipid transport; IEA.

R GO; GO:0006694; P:steroid biosynthesis; IEA.

R InterPro; IPR00799; StART.

R InterPro; IPR000799; START.

R InterPro; IPR002913; START; 1.

R PAINTS; PR00854; START; 1.

R PRINTS; PR00978; START; 1.

R PRINTS; PR00978; START; 1.

R PROSITE; PS50848; START; 1.

R PROSITE; PS50848; START; 1.

R SMART; SM00234; START; 1.

W Hypothetical protein.

SEQUENCE 501 AA; 55355 MW; 3F3EEF2C413BD3BB CRC64;
                                                    48;
                                                                                                                                                                                                                                                                      Gaps
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